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ABSTRACT

The appendix is a guide to the curriculum and training procedures of the Integrated Management of Cerebral Palsy project which evaluated the effectiveness of a program of conductive education. Introductory sections provide an overview of conductive education (training motorically disabled children in small, motivating groups of similarly handicapped peers to actively and voluntarily pursue those movements that are both incompatible with reflexes and functional in their self care applications), the definition of special terms, and the detailed description of special equipment. The project's daily calendar serves as the table of contents for the documentation entries that form the remainder of the book. Each activity listed on the calendar is associated with a letter-digit code which directs readers to a section which explains the activity in detail. Activities such as the following are covered: academic instruction, bathing, hand washing, dressing, eating, group games, exercises for the hands and arms, drinking, bedtime activities, exercises for developing gross motor skills, standing, and walking. Where appropriate, descriptions of activities include accompanying verbal instructions, rationale and functional applications for the activity, and adaptations of the activity for individuals. (For related information, see also EC 050 502, EC 050 504, and EC 050 505). (Author/GW)

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FINAL REPORT

Volume II of IV

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EVALUATING AN INTEGRATED APPROACH TO THE MANAGEMENT OF CEREBRAL PALSY

APPENDIX A: IMCP DOCUMENTATION HANDBOOK

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Evaluating an Integrated Approach to the Management of Cerebral Palsy

Appendix A: IMCP Documentation Handbook

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Foreword

The IMCP Documentation Handbook has been developed to make explicit the IMCP procedures as they are being evaluated. It is designed to provide a description of the entire intervention period, beginning February 1, 1971, the time at which the experimental group became complete, and ending with the termination of the current funding. Each section may be expanded to include any additions to the program that are made or revisions that may be found necessary. Thus, the dynamic nature of an integrated program is reflected in the handbook.

The Handbook is organized to maximize ease of updating. First, introductory sections present the general overview of conductive education, the definition of special terms, and the detailed description of special equipment. These sections are followed by the Daily Schedule Calendar, which serves as the table of contents for the documentation entries that form the remainder of the Handbook. Each entry represented on the calendar is associated with a letter-digit code, which directs the reader to a section in the alphabetized body of the book that explains the entry. A revision of any daily procedure is denoted by a change in the number (e.g., a revision of eating (E1) would become eating (E2)). The letter stays the same so, because of the alphabetical organization, all entries on a single topic appear together regardless of when they were added to the program.

The introduction to the Handbook provides a description of the philosophical ideals of an integrated management program. It gives the bases upon which the existing program is founded and sets forth the model procedures towards which the current program strives. The high level of motivation described, for example, may not be currently evident within the present program, however, the potential of that level exists and techniques for improving motivation are implemented with that ideal in mind.

Introduction

Integration is the key feature of Conductive Education. It arises from two major sources and allows for a total management program. The first of these is the placement of the entire responsibility for the care, treatment and education of the child in the hands of one kind of trained specialist -- the teacher-therapist. The second factor is a well-planned and comprehensive daily schedule, which integrates all situations for motor learning and their application.

The Teacher-Therapist.

In contrast to the conventional therapist, who is trained to treat many different kinds of disorders from the standpoint of her specific specialization, the teacher-therapist specializes in dealing with the motorically disabled patient in all areas of dysfunction. Thus, a teacher-therapist does not attempt to master the entire professional fields of physical therapy, occupational therapy, speech therapy and special education, but deals with all the functions of these fields as they pertain to the neuro-muscularly handicapped. Her specialization confines itself to the field of cerebral palsy in which she strives to become as knowledgeable and skilled as possible, devoting all energies of study and orientation to this specific area.

The teacher-therapist is in contact with the child throughout the day, taking part in all his activities. She is responsible for his entire life, including pottying, eating, dressing, and classroom activities. This unique arrangement gives her an unparalleled opportunity to view the child's entire day and to see him as a whole. She becomes well-acquainted with the child's personality, his needs and his abilities. She is able to understand those things which help or hamper the work of any given child and can judge his output on an over-all basis, as well as day-to-day. She is able to become acquainted with the child as no half-hour-a-week therapist can hope to do. In turn, the child comes to know and trust the teacher-therapist who helps him to complete his tasks successfully. The teacher-therapist is able to put to use her close relationship with the child to best motivate him to achieve those tasks which the daily schedule sets forth.

The teacher-therapist works in a team with one or more other teacher-therapists. One teacher-therapist leads and the others aid her by following her directions in assisting children to complete tasks, moving equipment and observing specific children while the lead teacher-therapist observes the entire group and sets the pace for it. Taking the lead is done on a revolving basis and all teacher-therapists have an opportunity to be both head and subordinate teacher-therapist during the course of a given shift, covering different activities on different days. This ensures a well-rounded teacher who knows all the activities from all possible perspectives. With this well-rounded viewpoint, the team is also better equipped to share information at the day's end and to combine ideas to evaluate progress and plan future work.

The teacher-therapist is like a classroom teacher in the respect that she is essentially trained to work with groups while dealing effectively with individual differences. Group cohesion is her major concern and she pays careful attention to keeping the group working together as a whole. With the help of her fellow teacher-therapist, she deals with the child's whole day, helping him to succeed in all areas of endeavor. In her capacity as lead teacher-therapist, she attends to the group as a whole and works for group unity and maximal activity. Although she relies upon the daily schedule to guide her in her carrying-out of all aspects of the child's daily life, she may also be flexible in choosing the amount of time spent on a specific activity with regard to the given day and group. She integrates all the information she has at hand to allow her to deal in the most effective way possible with each activity and the child's part in it. She, thus, becomes an essential factor in a total approach to the management of the motorically disabled individual.

The Daily Schedule.

The second most important component in a total approach is the daily schedule, which accounts for all events in the child's life from waking to bed-time (see Daily Schedule Calendar). The essence of the schedule is a combination of motor learning situations (activities) and opportunities to apply learned skills (applications). The schedule, therefore, is the teacher-therapist's major tool in leading her group through a successful, productive day of motor education.

The schedule plays an important part in the integrated nature of Conductive Education. For example, the relationship of a group of tasks carried out in a lying position to the next event is one of motor learning and immediate application (see section P). The groups of tasks in lying include movements designed to promote better standing and sitting skills and end with sliding to a stand at the end of the plinth and then sitting down on either a pot or a chair. In this way, the child can easily see the value of solving the motor tasks presented to him in the lying series and is, hence, highly motivated to improve his abilities in these areas. Similar logic can be seen in the proximity of the Hand Class to lunch since eating requires those motor skills involved in the preceding progression of motor problems. In this way, all functions which are naturally a part of the daily life of the child -- eating, pottying, dressing, drinking, etc. -- can provide natural opportunities for the application of learned skills. Motivation to improve is greatly increased when the child sees the immediate value of becoming more independent by increasing his motor skills. This contrasts sharply to a therapeutic learning situation in which the child might practice putting on his coat in the middle of the afternoon long before his mother comes and passively dresses him to take him home. The daily schedule of a Petö program provides for dressing and undressing skills to be applied in the morning upon rising and in the evening upon donning pajamas. This realistic kind of learning situation greatly increases motivation to improve. Time is used to its greatest advantage since natural functions which are a necessary part of residential living are carried out as application situations. There is, in fact, no wasted time since no part of the day is without its application value.

From the first moment of the child's entry into the group, he is expected to play an active part in each opportunity included in the daily schedule. The schedule provides a meaningful, natural time sequence in which he can see the results of applying his learned movements. In this way, the entire expectation for self-care is made clear to the child from the beginning of his integrated treatment program. He is, of course, given the facilitation necessary to complete each daily living necessity successfully.

In each application, certain basic skills recur; thus, the child is given an almost unlimited opportunity to use his motor learning. Extending and flexing the elbows, for example, appears in many applications, such as bringing cup, spoon, or toothbrush to the mouth or turning the pages of a book. In this way, generalized application can be made of these basic skills and the schedule carries out its essential role in providing learning situations and the opportunity to apply learned skills.

The daily schedule, as a structural entity, provides for four major different kinds of activities - Plinths, Hand Class, Standing and Walking, and School - and is, therefore, varied greatly in terms of pace and rhythm. Some activities, such as a Hand Class, might be rather quick-paced and interspersed with songs and poems. This kind of series might be contrasted to the Plinth Series which is a more formal session paced more slowly, although it, too, can be made flexible to fit the needs of the day and situation. The teacher therapist, in her special orientation to her group and its needs, is capable of modifying the way in which any activity is presented without destroying its basic structural integrity. The in-between applications are as important as the activities, and the daily schedule allows for necessities like long meal periods, permitting each child to feed himself to the best of his ability. During the meal period other tasks may be presented. For instance, a child who can walk independently might be assigned the duty of passing out plates, thus giving him an opportunity for the learning of social skills and the application of learned walking skills. Thus, the necessary function of eating provides an almost unlimited number of opportunities for improvement on a variety of levels in many areas.

Since the schedule remains basically the same for a reasonable period of time and is not constantly upset by change of rooms, therapists, and equipment, the child is secure in his knowledge of what is to be expected of him and in what situation. The basic daily program remains constant; thus time has an orderly meaningful place in the child's life. He knows the approximate length of an activity and when it will occur in relationship to other daily activities. The child, therefore, meets any new challenge from a basically secure frame of reference.

Motivation

Conductive Education is unique in the high level of motivation displayed by the children involved in this kind of program. This motivation is created by the following two major factors: the fact that this is primarily a learning process, not a therapy program, and the fact that this learning is done in groups.

The children are highly motivated to achieve and improve in this type of program because each motor skill is developed through active pursuit of movements that are functionally related to the child's own application goals, not through mere repetition of exercises. For example, the conventional therapist might develop voluntary grasp by having the child attempt to grasp a brightly colored toy without directing his attention to the movements needed for grasp (i.e., extending the fingers, abducting the thumb), but only telling him to "play." During an exercise, the teacher therapist, on the other hand, helps the child to develop this same skill by explaining to him that the rung of a chair placed in front of him is his goal and that his task is to grasp that rung. This is done together with the entire group and the child understands that his task is to grasp the rung and improve his skill in that movement. Consequently, his interest is not only in the object or in "playing", but rather in the motor problem-solving at hand. The movements needed for voluntary grasp are explained to him and he is conscious of them as he attempts to find a solution to his task. He comes to understand that this grasping will allow him to stand by holding onto a chair or to hold his spoon to feed himself, and later to manipulate independently things he may choose in his environment--thus application opportunities for each task are made clear. At the next opportunity (pottying or lunch, for example), he will be able to apply this skill and will see its value.

The child is not allowed to fail, regardless of the complexity of the task. The teacher-therapist assures his success with the help of facilitation and task modifications, which will be more fully explained in the definition of terms section. His success assures that natural motivation is sustained and thus the child attempts new tasks. The child is fully confident of the teacher-therapist's ability to assist him since she has proved an effective helper to him in previous situations. The teacher-therapist is able to facilitate the child to succeed in a way that requires of him his maximum contribution because she is acquainted with all phases of his daily life. Thus, the challenge of a new and interesting task, interest created by concentrated maximal output, and the positive feelings created by successful completion of the task result in high motivation to attempt subsequent tasks.

Motivation of the type described above appears to have an exceptionally high carry-over value since it comes from "natural" sources, rather than from "external" ones. A natural reward is one that occurs in the environment without the specific engineering of some external agent. The experience of success is an extremely positive feeling and one which never seems to lose its rewarding feature, as is often the case with such commonly used contrived rewards as candy or tokens.

The use of success as a reinforcement for developing motor skills is in direct contrast to methods which conventional therapists are often forced to use by the system of short, individual therapy sessions. In the little time available, the conventional therapist is obliged to employ any and all means at her disposal to motivate the child. This often leads, quite naturally. to a kind of cajoling or wooing technique which may in turn produce an exaggerated image in the child's mind of his own importance. When the therapist is not present and no external motivational devices are being used, the child may have no desire to attempt to improve his motor skills. In the conventional setting, the child is not always made aware of the motor skills that the therapist is attempting to improve or develop. In contrast to this, the teacher-therapist makes clear to the child exactly what his task is and, if necessary, how he may go about solving it. If the child understands the task and how to do it, he will not only feel more responsible for his own improvement, but will also be more likely to be able to repeat the same movement if asked again, or to generalize the movement to a functional application of solving a problem or completing a daily living task in his environment. The skill is learned by the child, with his full awareness and conscious desire.

The Group

In Conductive Education, the children work in groups, and within the group each child is encouraged to work as independently as possible in completing the tasks. Although one of several teacher therapists moves among the children and each child is aware of her presence, he is also cognizant that, as one individual in a group, he must strive as independently as he can, so others may receive a portion of the teacher therapist's time. Therefore, as the child works independently, receiving help when he needs it, he begins to see himself in perspective, as an important, unique individual who is a part of a unit performing together, each of whom is expected to achieve to the best of his capabilities. This learning situation closely parallels that of normal children in a conventional classroom setting.

In the group the child learns those social skills and values which so often appear to be lacking in the severely handicapped child. The chance to develop friendships with other children allows for the establishment of feelings of interest in and concern for others. The need to communicate verbally becomes evident and motivation to improve speech develops. Security within the group reduces fear, making the attempting of a new task seem less awesome, particularly in view of the participation of others with similar handicaps. When the entire group performs together, the child gains a more meaningful concept of time and the need to perform within given time limits. This idea is one which is especially difficult to develop in a one-to-one learning situation. The group also provides a second natural source for reinforcement. Group approval adds to the child's desire to continue to strive for successful completion of all tasks.

The unity of the group is preserved throughout all activities by the fact that one room is the setting for everything from school to sleeping. Change-of-place can be achieved with success and within reasonable time limits because going from the bed-plinth to the breakfast table may be the distance of only a few feet. The child is not placed in a wheelchair from his bed and then whisked down a long corridor to the dining room by an aide or houseparent, but rather slides himself to a stand at the end of his bed, takes hold of his chair and pushes it to his place at the breakfast table with as little facilitation as is necessary to complete the change of place.

Definition Of Terms

Facilitation

Facilitation is the most essential tool of the teacher-therapist in her role of leading the child to successful completion of those motor problems which she presents to him. In the context of Conductive Education, facilitation may be defined as the minimum help which the child needs to complete an intended task successfully. In contrast to other kinds of conventional aid, facilitation is not only aid given by the teacher-therapist by holding or touching the child, but may come from other children, equipment, or the child himself as well as from the teacher-therapist. It is never a rigid technique but rather a constantly decreasing and extremely flexible tool, specific to the needs and abilities of the child and his situation at that moment. Facilitation not only can, but must change with each day's work. The child who actively pursues a task is given only as much help as he needs for the maximal successful accomplishment of the task; therefore, as the child's motor skills improve, the amount of facilitation decreases and is eventually removed entirely. The child is given feedback constantly in order to make him aware at all times that he is being helped and precisely how. Thus, he is apprised of the contribution he is making to the solution of the task and how his part in it can be increased. He is always encouraged to become as independent of facilitation as possible.

Facilitation may be given to the child in many different forms and degrees. A number of these arise from contact between the teacher-therapist and the child, and some of them are presented in order of increasing independence as follows:

1. The teacher-therapist may passively move the child to the desired position in order to demonstrate the task. Once the child has felt the movement, he is then asked to perform as much of it as he can by himself.

2. The teacher-therapist may move the necessary body part(s) along with the child to add sufficient strength to allow completion of the task.

3. The teacher-therapist may touch a specific place on the child's body in order to allow him to continue movement in the desired direction or to keep it from deviating during movement to the desired position. For example, if the child is attempting to flex one knee, putting the sole flat, while lying on his back, the teacher-therapist might facilitate by lightly touching the ankle to prevent backsliding as the child works at bending.

4. The teacher-therapist may fix one part of the body while another is moving under the independent control of the child. A splint (see description of special devices) may take the place of a teacher-therapist in certain instances where fixing is necessary.

5. The teacher-therapist may fix a part of the body after the child has moved it by himself to the desired position. For example, once a child has independently grasped a stick, the teacher-therapist then facilitates by helping the child to keep his wrist extended, removing the aid intermittently until the child can maintain the grasp independently.

6. The teacher-therapist may offer security without touching the child. She may merely advise the child while remaining

close enough to touch the child if necessary and to prevent fear and injury.

7. The teacher-therapist may direct the child at a greater distance than in the above (perhaps from across the room), merely giving directions and helping the child to an understanding of what is needed to solve the task.

8. The teacher-therapist may use another child in the group as an example to help the child understand what is expected or how the task may be solved.

9. The teacher-therapist may serve as an example herself as in the case of a Hand Class during which she sits at the front of the room and performs each task with the group.

The equipment can also offer facilitation in several ways. Some of them are (again, in order of increasing independence) as follows:

1. A piece of equipment may offer direct support. For example, the child may walk holding onto a chair on either side, moving them as he walks.

2. A piece of equipment may give intermittent support. The child may push a chair ahead of him as he walks, releasing it to clap his hands.

3. A piece of equipment may give indirect support and security. For example, a child may walk between two rows of chairs without touching them.

4. A piece of equipment may serve as a goal in a task. For example, while lying on his back the child may stretch his arms above his head to touch the wall.

Rhythmical Intention

The child may facilitate himself in two major ways: They are as follows:

1. Before beginning the task, the child may state the intention of the action. For example, "I put my left hand on my neck." This gives the child a clear description of the motor problem which is to be solved, focuses his complete attention on the task and brings to mind former situations in which he has performed the same or a similar action.

2. While carrying out the task the child may count together with the other members of the group to set the rhythm and time needed to reach the desired position. The counting is usually from one to five, but may be "one, two," or even words such as "up," "down," or "left," "right" (in walking) which may be spoken rhythmically during the performance of the task.

The above two components comprise the unique self-facilitator known as rhythmical intention. Although no formal neurological explanation of this phenomenon has yet been published, it is assumed to be explainable on the basis of work done by A.R. Luria (1966) concerning the relationship of language and motor performance. Luria, (a contemporary of Petö), developed his theory concerning the facilitating effects of simultaneous vocalization on motor learning. At approximately the same time, Petö originated his conductive approach to the management of neuromuscular disorders. The work of Petö serves as a practical proving ground for Luria's theory. Luria, in explanation, related his theory to Pavlov's (1928) second signalling system, claiming that intentional speech serves as the secondary signal in normal children and even adults when attempting difficult tasks. Luria, upon visiting the Budapest Institute for Movement Therapy, remarked that work being done there by Petö and his staff pointed up the validity of his hypothesis.

Task Modification

This tool of the teacher-therapist allows children of varied levels of handicap to function together as a group and experience maximal independence in both activities and applications. It is possible to modify a task in two basic ways:

1. Upgrading - This makes the task more complex and/or difficult for a child who is able to perform it adequately as presented to the group as a whole. Upgrading nearly always keeps the movement as stated in the intention essentially the same, allowing for it to be repeated several times, performed with less support than the group in general, adding the use of a piece of equipment, or combining it with movement of other body parts. (See sections P, H, and S.)

2. Simplifying - Similarly, each task may be simplified for those less capable individuals by requiring only one successful performance while the group repeats several times. Equipment may serve as a special target or as a support in this kind of task modification. Body position may be also changed to allow successful independent completion of the task. As with upgrading, simplification retains the basic movement and upward revisions are implemented as the child's performance advances.

Both types of task modification allow for the same intention to be repeated by all children at the same time, although each child has a specific reference point for his own task. The lead teacher-therapist, when she explains the intended movement to the group, further assigns these modified tasks to individual children and, thus, each child is apprised of his own duty and how to perform it. Understanding another child's goal and how he procedes to achieve it, can give him a preview of a more complex form of his own task which may be a future goal for him.

Description of Special Devices

Plinth

The plinth is a slatted wooden bench measuring approximately 71½" long X 30½" wide X 18" high. The children lie on the plinths when carrying out the tasks in the Plinth Series. In the Hand Class series, the children sometimes sit at the plinth and use the slats for targeting, grasping and supporting themselves. When covered with a foam mattress, the plinth provides a sleeping place. It may also be covered with a table top (made of masonite sheeting) to become a table for school or meals.

Box

A square wooden box (dimensions vary) is sometimes used in place of a chair during Hand Class. Without a chair back for support, the child is required to lean forward and thereby achieve a better sitting balance.

Chair

Each child has an appropriately sized individual wooden chair with a straight back and a flat seat. On the back of each chair there is a small cloth bag containing the child's personal items. These chairs are used for the child's moving about by pushing the chair ahead of him and using it as a support.

Chair Adaption

Chair adaptations are often made temporarily to facilitate a child for whom sitting is extremely difficult. These include "wings," boards that are in the vertical plane and flared out from the back of the chair, to prevent a child from falling to the side, wedges to abduct the legs, and belts to prevent hip extension. These adaptations assure that all children are able to participate in sitting activity without the constant aid of a teacher-therapist. During some period of every day, however, every child is required to sit in a regular, unadapted chair. This unsupported sitting provides the child with his sitting goal and gives him the opportunity to work toward its achievement.

Ladderbacks

High back chairs (height 60", seat dimensions 13" X 15", seat 12" from floor) with 12 ladder-like rungs are used for targeting, grasp and release while the child is in a lying position on the plinth or while in a sitting position away from the tables. These ladderbacks are used for support in standing as well. The child grasps a rung with both hands to pull to a stand and remains standing with the support of the ladderback. Sometimes ladderbacks are used for support while the children are sitting on their pots. One may be placed in front or one on each side, which the child grasps for support.

Pots

The pots are used for training and regulating bladder and bowel control. There are two types used depending on the child's sitting balance and/or size. The first type is circular-shaped (8 inches diameter) and 5 inches from the floor with no seat. The second type has a seat providing back and side support (like a small arm chair). These sometimes rest directly on the floor or are raised on a wooden platform if the child's leg length requires it.

Sticks

Cylindrical (rung like) wooden sticks with a diameter of one inch and a length of one foot are used for grasp, release and targeting during walking, eating, writing, sitting and lying activities. For example, in learning the hand-to-mouth movement needed for eating, a child might grasp a stick and bring it to his mouth to approximate the motion. Smaller balsa wood sticks may also be used for developing fine motor skills.

Double-Handled Cups

Plastic cups with a capacity of 360cc of liquid and with 3 inch handles set 3/4 inch from the side of the cup on both sides,to allow for grasp with the entire hand,are used for all drinking. These teach symmetrical grasp, release, and hand-to-mouth movements. Only when a child is sufficiently independent in drinking from these large cups does he begin to use an ordinary glass.

Splints

Knee splints are used to maintain knee extension for weight-bearing while standing. They are made of plexiglas and have a leather knee pad that can be adjusted to assure maximal extension. Leather straps secure the splint at thigh and ankle.

Elbow splints are used to maintain elbow extension. These splints are made of heavy cloth with lengthwise pockets sewn in to allow for the insertion of metal staves and are fastened around the arm with Velcro strips. Both kinds of splints are used only temporarily during a specific activity to allow the child to maintain extension of a limb and thus function without the support of a teacher-therapist.

Specially-Adapted Shoes

When necessary, hard-soled high-topped (boys' work-type) shoes are built up with cork to insure inward or outward rotation of the foot or ankle dorsiflexion while weight bearing.

Helmets

To prevent head injuries resulting from falls, some children are provided with plastic hockey-type helmets or leather helmets with soft padding.

Canes

Wooden canes with T-shaped handles may be used as temporary support to facilitate the transition from walking between two chairs to independent walking. Often these are used in combination with the knee splints.

DAILY SCHEDULE CALENDAR

TIME	FEBRUARY - 1971	MARCH- 1971
6:00 - 6:15	Rising, morning washing (W1), and pre-meal activities (I1)	
6:15 - 6:30		
6:30 - 6:45		
6:45 - 7:00		
7:00 - 7:15	Breakfast (E1)	
7:15 - 7:30		
7:30 - 7:45		
7:45 - 8:00		
8:00 - 8:15	Pottying (T1) dressing (D1)	
8:15 - 8:30		
8:30 - 8:45	Rest or free play period (F1)	
8:45 - 9:00		
9:00 - 9:15	Plinth Series (P1) and Pushing Off (O1)	Plinth Series (P3)
9:15 - 9:30		
9:30 - 9:45		
9:45 - 10:00		
10:00 - 10:15		
10:15 - 10:30	Moving to tables (M1) Juice (J1), Pottying (T1)	Hand class (H1) and individual standing and walking activities (S2)
10:30 - 10:45		
10:45 - 11:00	Sitting and standing (S1)	
11:00 - 11:15		
11:15 - 11:30		
11:30 - 11:45	Informal hand wash (C1)	
11:45 - 12:00	Lunch (E1) and Pottying (T1)	
12:00 - 12:15		
12:15 - 12:30		
12:30 - 12:45		
12:45 - 1:00	Rest period or free play (F1) and moving to tables (M1)	
1:00 - 1:15		
1:15 - 1:30		
1:30 - 1:45	School (A1) (one group two days a week, split group three days a week)	
1:45 - 2:00		
2:00 - 2:15		
2:15 - 2:30		
2:30 - 2:45		
2:45 - 3:00		
3:00 - 3:15	Juice (J1) treats Moving to plinths (M1) and (T1)	
3:15 - 3:30		
3:30 - 3:45	Short plinth series (P2)	Individual tasks (S2)
3:45 - 4:00		
4:00 - 4:15		
4:15 - 4:30	Moving to tables (M1)	
4:30 - 4:45	Informal hand wash (C1)	
4:45 - 5:00	Supper (E1), moving to plinths (M1) and pottying (T1)	
5:00 - 5:15		
5:15 - 5:30		
5:30 - 5:45		
5:45 - 6:00		
6:00 - 6:15	Undressing (D1) and bathing (B1)	
6:15 - 6:30		
6:30 - 6:45	Bedtime activities (N1) free period (F1)	
6:45 - 7:00		
7:00 - 7:15	Pottying (T1), lights out, retiring	
7:15 - 7:30		

DAILY SCHEDULE CALENDAR

TIME	APRIL - 1971	MAY-1971
6:00 - 6:15	Rising, washing at tables (W2)	
6:15 - 6:30		
6:30 - 6:45		
6:45 - 7:00	Breakfast (E1)	
7:00 - 7:15		
7:15 - 7:30		
7:30 - 7:45		
7:45 - 8:00		
8:00 - 8:15	T1 & D1 (cont.)	
8:15 - 8:30		
8:30 - 8:45	F1 (cont.)	
8:45 - 9:00		
9:00 - 9:15	P3 (cont.)	
9:15 - 9:30		
9:30 - 9:45		
9:45 - 10:00		
10:00 - 10:15		
10:15 - 10:30	M1, J1, & T1 (cont.)	
10:30 - 10:45	H1 & S2 (cont.)	
10:45 - 11:00		
11:00 - 11:15		
11:15 - 11:30		
11:30 - 11:45	Hand washing (C2) and pre-lunch activities (I1)	
11:45 - 12:00		
12:00 - 12:15	Lunch (E1) & T1	
12:15 - 12:30		
12:30 - 12:45		
12:45 - 1:00	F1 & M1 (cont.)	
1:00 - 1:15		
1:15 - 1:30		
1:30 - 1:45	School (A1) (one group two days a week, split group three days a week)	
1:45 - 2:00		
2:00 - 2:15		
2:15 - 2:30		
2:30 - 2:45		
2:45 - 3:00		
3:00 - 3:15	J1, M1, & T1 (cont.)	
3:15 - 3:30		
3:30 - 3:45	Group activity or game period (G1) and individual tasks (S2)	
3:45 - 4:00		
4:00 - 4:15		
4:15 - 4:30	Moving to tables (M1)	
4:30 - 4:45	Handwashing (C2) and pre-supper activities (I1)	
4:45 - 5:00		
5:00 - 5:15	Supper (E1), M1 & T1 (cont.)	
5:15 - 5:30		
5:30 - 5:45		
5:45 - 6:00		
6:00 - 6:15	Undressing (D1) and bathing (B1)	
6:15 - 6:30		
6:30 - 6:45	Bedtime activities (N1) or free period (F1)	
6:45 - 7:00		
7:00 - 7:15	Pottying (T1), lights out and retiring	
7:15 - 7:30		

DAILY SCHEDULE CALENDAR

TIME	JUNE - 1971	JULY - 1971
6:00 - 6:15	Rising, washing at tables (W2)	
6:15 - 6:30		
6:30 - 6:45		
6:45 - 7:00	Breakfast (E1)	
7:00 - 7:15		
7:15 - 7:30		
7:30 - 7:45		
7:45 - 8:00		
8:00 - 8:15	T1 & D1 (cont.)	
8:15 - 8:30		
8:30 - 8:45	F1 (cont.)	
8:45 - 9:00		
9:00 - 9:15	P3 (cont.)	
9:15 - 9:30		
9:30 - 9:45		
9:45 - 10:00		
10:00 - 10:15		
10:15 - 10:30	M1, J1, & T1 (cont.)	
10:30 - 10:45	H1 & S2 (cont.)	Hand class (H2)
10:45 - 11:00		
11:00 - 11:15		
11:15 - 11:30		
11:30 - 11:45	Formal handwashing (C3) and pre-lunch activities (I1)	
11:45 - 12:00		
12:00 - 12:15	Lunch (E1)	
12:15 - 12:30		
12:30 - 12:45		
12:45 - 1:00	F1 & M1 (cont.)	
1:00 - 1:15		
1:15 - 1:30		
1:30 - 1:45	School (A1)	Individual tasks (three groups) (S3)
1:45 - 2:00		
2:00 - 2:15		
2:15 - 2:30		
2:30 - 2:45		M1, J1, & T1
2:45 - 3:00		
3:00 - 3:15	M1, J1, & T1 (cont.)	School (A1)
3:15 - 3:30		
3:30 - 3:45	Group activity or game period (G1)	
3:45 - 4:00		
4:00 - 4:15		
4:15 - 4:30	Moving to tables (M1)	
4:30 - 4:45	Formal handwashing (C3) and pre-supper activities (I1)	
4:45 - 5:00		
5:00 - 5:15	Supper (E1), M1 & T1 (cont.)	
5:15 - 5:30		
5:30 - 5:45		
5:45 - 6:00		
6:00 - 6:15	Undressing (D1) and bathing (B1)	
6:15 - 6:30		
6:30 - 6:45	Bedtime activities (N1) or free period (F1)	
6:45 - 7:00		
7:00 - 7:15	T1, lights out, retiring	
7:15 - 7:30		

DAILY SCHEDULE CALENDAR

TIME	AUGUST - 1971	SEPTEMBER -1971
6:00 - 6:15	Rising, washing at tables (W2)	
6:15 - 6:30		
6:30 - 6:45		
6:45 - 7:00	Breakfast (E1)	
7:00 - 7:15		
7:15 - 7:30		
7:30 - 7:45		
7:45 - 8:00		
8:00 - 8:15	T1 & D1 (cont.)	
8:15 - 8:30		
8:30 - 8:45	F1 (cont.)	
8:45 - 9:00		
9:00 - 9:15	P3 (cont.)	Plinth series (P4) (and pushing off) and standing (O1)
9:15 - 9:30		
9:30 - 9:45		
9:45 - 10:00		
10:00 - 10:15		Pottying (T1), (M1), (J1)
10:15 - 10:30	M1, J1, & T1 (cont.)	
10:30 - 10:45	H2 (cont.)	
10:45 - 11:00		
11:00 - 11:15		
11:15 - 11:30		
11:30 - 11:45	C3 & I1 (cont.)	
11:45 - 12:00		
12:00 - 12:15	Lunch (E1)	
12:15 - 12:30		
12:30 - 12:45		
12:45 - 1:00	F1 & M1 (cont.)	
1:00 - 1:15		
1:15 - 1:30		
1:30 - 1:45	S3 (cont.)	Standing and walking (S4)
1:45 - 2:00		
2:00 - 2:15		
2:15 - 2:30		
2:30 - 2:45	M1, J1, & T1 (cont.)	
2:45 - 3:00		
3:00 - 3:15	School (A1) (split group for three weeks, whole group for one week)	
3:15 - 3:30		
3:30 - 3:45		
3:45 - 4:00		
4:00 - 4:15		
4:15 - 4:30		
4:30 - 4:45	C3 & I1 (cont.)	
4:45 - 5:00		
5:00 - 5:15	E1, M1, & T1 (cont.)	
5:15 - 5:30		
5:30 - 5:45		
5:45 - 6:00		
6:00 - 6:15	D1 & B1 (cont.)	
6:15 - 6:30		
6:30 - 6:45	N1 & F1 (cont.)	
6:45 - 7:00		
7:00 - 7:15	T1, lights out, retiring	
7:15 - 7:30		

DAILY SCHEDULE CALENDAR

TIME	OCTOBER - 1971	NOVEMBER - 1971
6:00 - 6:15	Dressing (D2)	
6:15 - 6:30		
6:30 - 6:45		
6:45 - 7:00		
7:00 - 7:15	Breakfast (E1) and pottying (T1)	
7:15 - 7:30		
7:30 - 7:45		
7:45 - 8:00		
8:00 - 8:15	Dressing (D2)	
8:15 - 8:30		
8:30 - 8:45	F1 (cont.)	
8:45 - 9:00		
9:00 - 9:15	P4 & T1	
9:15 - 9:30		
9:30 - 9:45		
9:45 - 10:00		
10:00 - 10:15		
10:15 - 10:30	M1 & J1	
10:30 - 10:45	Hand class (H2)	
10:45 - 11:00		
11:00 - 11:15		
11:15 - 11:30		
11:30 - 11:45	C3 & I1 (cont.)	
11:45 - 12:00	Lunch (E1)	
12:00 - 12:15		
12:15 - 12:30		
12:30 - 12:45	M1 & T1	
12:45 - 1:00	Rest or free play period (F1)	
1:00 - 1:15		
1:15 - 1:30	Putting on braces, shoes, etc Moving to S&W activity (M1) Standing and walking (S4)	Standing and walking activities (S5) (Individual tasks M-W-F and group activities T-Th)
1:30 - 1:45		
1:45 - 2:00		
2:00 - 2:15		
2:15 - 2:30		
2:30 - 2:45	T1 & M1	
2:45 - 3:00	Water and treats (J1)	
3:00 - 3:15	School (A1) (split group for three weeks, whole group for one week)	
3:15 - 3:30		
3:30 - 3:45		
3:45 - 4:00		
4:00 - 4:15		
4:15 - 4:30		
4:30 - 4:45	C3 & I1 (cont.)	
4:45 - 5:00		
5:00 - 5:15	E1, M1, & T1 (cont.)	
5:15 - 5:30		
5:30 - 5:45		
5:45 - 6:00		
6:00 - 6:15	D2 & B1 (cont.)	
6:15 - 6:30		
6:30 - 6:45	M1 & F1 (cont.)	
6:45 - 7:00		
7:00 - 7:15	T1, lights out, retiring	
7:15 - 7:30		

DAILY SCHEDULE CALENDAR

TIME	DECEMBER - 1971	JANUARY, 1972
6:00 - 6:15	Dressing (D2)	
6:15 - 6:30		
6:30 - 6:45		
6:45 - 7:00		
7:00 - 7:15	Breakfast (E1) and pottying (T1)	
7:15 - 7:30		
7:30 - 7:45		
7:45 - 8:00		
8:00 - 8:15	Dressing (D2)	
8:15 - 8:30		
8:30 - 8:45	F1 (cont.)	
8:45 - 9:00		
9:00 - 9:15	P4 & T1	
9:15 - 9:30		
9:30 - 9:45		
9:45 -10:00		
10:00 -10:15		
10:15 -10:30	M1 & J1	
10:30 -10:45	Hand class (H2)	
10:45 -11:00		
11:00 -11:15		
11:15 -11:30		
11:30 -11:45	C3 & I1 (cont.)	
11:45 -12:00	Lunch (E1)	
12:00 -12:15		
12:15 -12:30		
12:30 -12:45	M1 & T1	
12:45 - 1:00	Rest or free play period (F1)	
1:00 - 1:15		
1:15 - 1:30	Standing and walking activities (S5) (Individual tasks M-W-F and group activities T-Th)	
1:30 - 1:45		
1:45 - 2:00		
2:00 - 2:15		
2:15 - 2:30		
2:30 - 2:45	T1 & M1	
2:45 - 3:00	Water and treats (J1)	
3:00 - 3:15	School (A1) (split group for three weeks, whole group for one week)	
3:15 - 3:30		
3:30 - 3:45		
3:45 - 4:00		
4:00 - 4:15		
4:15 - 4:30		
4:30 - 4:45	C3 & I1 (cont.)	
4:45 - 5:00		
5:00 - 5:15	E1, M1, & T1 (cont.)	
5:15 - 5:30		
5:30 - 5:45		
5:45 - 6:00		
6:00 - 6:15	D2 & B1 (cont.)	
6:15 - 6:30		
6:30 - 6:45	N1 & F1 (cont.)	
6:45 - 7:00		
7:00 - 7:15	T1, lights out, retiring	
7:15 - 7:30		

DAILY SCHEDULE CALENDAR

TIME	FEBRUARY - 1972	MARCH - 1972
6:00 - 6:15	Dressing (D2)	
6:15 - 6:30		
6:30 - 6:45		Hand and face washing (C4)
6:45 - 7:00		
7:00 - 7:15	Breakfast (E1 and pottying (T1)	
7:15 - 7:30		
7:30 - 7:45		
7:45 - 8:00		
8:00 - 8:15	Dressing (D2)	
8:15 - 8:30		
8:30 - 8:45	F1 (cont.)	
8:45 - 9:00		
9:00 - 9:15	P4 & T1	
9:15 - 9:30		
9:30 - 9:45		
9:45 - 10:00		
10:00 - 10:15		
10:15 - 10:30	J1 & M1	
10:30 - 10:45	Standing and walking activities (S6)	
10:45 - 11:00		
11:00 - 11:15		
11:15 - 11:30		
11:30 - 11:45	C3 & I1 (cont.)	I2
11:45 - 12:00	Lunch (E1)	
12:00 - 12:15		
12:15 - 12:30		
12:30 - 12:45	M1 & T1	
12:45 - 1:00	Rest or free play period (F1)	
1:00 - 1:15		
1:15 - 1:30		
1:30 - 1:45	School (A1) (Split group 4 days, whole group 1 day)	
1:45 - 2:00		
2:00 - 2:15		
2:15 - 2:30		
2:30 - 2:45		
2:45 - 3:00		
3:00 - 3:15	M1, J1, T1	
3:15 - 3:30		
3:30 - 3:45	H2 (cont.)	
3:45 - 4:00		
4:00 - 4:15		
4:15 - 4:30		
4:30 - 4:45	C3 & I1 (cont.)	
4:45 - 5:00		I2
5:00 - 5:15	E1, M1, & T1 (cont.)	
5:15 - 5:30		
5:30 - 5:45		
5:45 - 6:00		
6:00 - 6:15	D2 & B1 (cont.)	
6:15 - 6:30		
6:30 - 6:45	N1 & F1 (cont.)	
6:45 - 7:00		
7:00 - 7:15	T1, lights out, retiring	
7:15 - 7:30		

DAILY SCHEDULE CALENDAR

APRIL - 1972

TIME		
6:00 - 6:15		
6:15 - 6:30		
6:30 - 6:45	M2	
6:45 - 7:00		
7:00 - 7:15		
7:15 - 7:30		
7:30 - 7:45		
7:45 - 8:00		
8:00 - 8:15		
8:15 - 8:30		
8:30 - 8:45		
8:45 - 9:00		
9:00 - 9:15		
9:15 - 9:30		
9:30 - 9:45		
9:45 - 10:00		
10:00 - 10:15		
10:15 - 10:30	M2	
10:30 - 10:45		
10:45 - 11:00		
11:00 - 11:15		
11:15 - 11:30		
11:30 - 11:45		
11:45 - 12:00		
12:00 - 12:15		
12:15 - 12:30		
12:30 - 12:45	M2	
12:45 - 1:00		
1:00 - 1:15		
1:15 - 1:30		
1:30 - 1:45	School (A2) (Split group 4 days, whole group Fridays)	
1:45 - 2:00		
2:00 - 2:15		
2:15 - 2:30		
2:30 - 2:45		
2:45 - 3:00		
3:00 - 3:15	M2	
3:15 - 3:30		
3:30 - 3:45		
3:45 - 4:00		
4:00 - 4:15		
4:15 - 4:30		
4:30 - 4:45		
4:45 - 5:00		
5:00 - 5:15		
5:15 - 5:30		
5:30 - 5:45		
5:45 - 6:00		
6:00 - 6:15		
6:15 - 6:30		
6:30 - 6:45		
6:45 - 7:00		

School (A1)

School, which lasts about $1\frac{1}{2}$ hours daily, Monday through Friday, is devoted to the academic areas of the curriculum, especially reading, numbers, and language. At the same time, the school program seeks to incorporate meaningful use of motor skills that have been emphasized throughout the day. Those which receive special application during school are erect sitting with head control, controlled movements of the arms and hands and speech. The controlled use of hands and arms is required to manipulate blocks and balls during numbers work, to roll playdough balls for counting and to target in order to indicate answers in matching and sequencing. Speech is encouraged by the question and answer method. Questions are often worded in such a way as to elicit a set response, i.e. reciting a "sitting poem", responding "I am here" to roll call, and reading sentences aloud. Opportunities for spontaneous speech are also given.

While one teacher-therapist has the major responsibility for programming and supervising the school activities, all are rotated into the teaching position to assure that the total-involvement-with-the-child principle of integrated management is extended to academic activities. About 3/5 of the school time is spent with the children divided into Primary and Pre-Primary classes, and about 2/5 of the time is spent with the two classes combined. The school-supervising teacher therapist always teaches the Primary group; the rotating teacher therapist always teaches the Pre-Primary group. Rotation for the Pre-Primary group occurs every four weeks. For the fourth week the two classes are combined under the instruction of the rotating teacher therapist. For one day of each of the other three weeks, the groups are combined under the tutelage of the supervising teacher.

All school sessions begin with a standard opening, typically a "sitting poem", discussion of the day of the week, the weather, "news" of the day concerning the children's activities, and roll call. At the end of school, a quick summary of the day's school activities and children's accomplishments is made.

Academic Content

The academic content is developed by the teacher therapists who are currently responsible for teaching. The content that has been included this far appears in the three sections below, one for the Pre-Primary Class, one for the Primary Class and one for the combined classes.

Pre-Primary Class.

Language has been the main emphasis for the Pre-Primary Class. The curriculum has centered on experiences to remediate sensory-motor deficits and on applications of language to those experiences. The specific content of the Pre-Primary Class has been:

Numbers:
    Counting from 1-5.
    Recognizing numerals 1-5.
    Application of generalized more/less concept.
    Addition using the numbers from 1 to 3.

Reading:
    Recognition of key words - names, days of week. stop, go.
    Card sorting for same/different pictures.

Language:
    Language relating to body image - facial features and location, left, right, legs, arms, ankle, elbow, knee, wrist, hips, tummy, back, head.

    Language relating to motor acts - grab, push, pull, pour, blow, stir, squeeze (fist), open (fist), over (hand).
    Direction - left, right; up, down; higher, lower; to me, away.

    Language relating to time - days of week, parts of day, as morning, etc., and as Plinths, Hand Class, etc.

    Language relating to emotions - good, bad, happy, sad, love.

    Language related to weather - hot, cold, warm, cool, windy, rainy, snow, appropriate clothing.

    Language related to family - father, mother, brother, sister, grandmother, grandfather, baby.

Auditory Discrimination:
    initial sounds of words
    rhythm band instruments
    animal sounds
    higher/lower
    fast/slow
    loud/soft

Visual Discrimination:
    colors - red, blue, green, yellow, pink, orange, black.

shapes - circle, square, triangle, [illegible], [illegible].
size - big, small.
figure - ground.
same, different (and "just like").

Tactile - kinesthetic discrimination:
temperature - hot, cold, warm.
texture - hard, soft, smooth, rough.
shape - sharp, thin, thick, round, flat, straight, bent.
size - big, little.
weight - heavy, light.

Taste discrimination:
sweet, sour, salty.

The learning of this content is reinforced through application in a variety of situations.

Primary Class.

The emphasis for the Primary Group is directed mainly toward reading and numbers work. The Programmed Reading Series developed by Sullivan Associates is used as the basis of the reading program. It was chosen because it seemed to have some parallels to the Hungarian School method, namely the phonetic approach, the highly structured and carefully controlled progression, and the utilization of writing skills. Academic content of the Primary Class has been:

Numbers:
Counting from 1-10.
Recognizing numerals from 1-10.
Arithmetic symbols for plus (+) and equals (=), and their application.
Addition of numbers between 1 and 6.
Application of generalized more/less concept.

Reading:
Name and recognize letters a, i, m, n, p, t, f, and th (combined).
Knowing and recognizing the prescribed "sound" of the above letters.
Reading 18 words using the above letters.
Concept of sentence - telling sentences, asking sentences, period and question mark.
Knowing capital letters A and I.
Knowing sight words, yes and no, I am here, children's names, days of week, stop, go, is, today, weather, the news, about, cold, hot, warm, cool, windy, rain, snow, October, November.
Understanding and applying "spell" and "pronounce."

Understand capital/small letters.
Developing eye movements. (Materials are always sequenced from left to right and from top to bottom.)

Writing: (facilitation used for grasp and for the writing)
Printing name.
Writing numerals 1-5.
Printing letters, a, i, m, n, p, t, and f.

Calendar:
Days of week from Sunday through Saturday, location in calendar.
Length of month.
Location of name of month.
Generalized application of these calendar concepts.

Combined Class.

When Primary and Pre-Primary Classes meet together for School, the content might be described as similar to that of the Pre-Primary Class. There are two main differences, however. First, since the beginning of November, 1971, school time has included a writing class once a week, aimed at developing the controlled arm and hand movements of writing. Rhythmic intention is utilized and the children receive practically no facilitation as they "write." Present levels in ability range from being unable to draw a six-inch line vertically between two dots, to being able to draw curved lines, and to print letters and numerals.

The second difference between the Pre-Primary Class and the combined class meetings is that one week each month a unit is developed which centers on some subject appropriate to the season and to the children's understanding.

Units which have been studied since February are listed below. A list of the concepts that were covered is presented for each unit.

Food - sense of taste and location, sense of smell and location, taste discrimination, circle, red, orange, lemon, half,sharp, stir, cook, knife, spoon, pan.

Spring - season change, bean plant growth, green, grow, buds and leaves growing larger, frog metamorphosis, magnifying glass, blow.

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Animals - especially farm animals - vocabulary of names of animals and their young: food for animals, trip to Irvine Park zoo, recognizing animals and their characteristics, sounds of animals.

Music and rhythm band - names of rhythm band instruments, high/low, fast/slow, loud/soft, march, conductor.

Circus - clown, acrobat, pole, tent, facial features and location, penny, nickle, 5 pennies = 1 nickel, trick animals, e.g., counting horse, mask, tie.

Science - color, mixing, stir, iron magnets, pick up, sort; rocks, hard, soft, pound, heavy; temperature, thermometer, hot, cold, up, down.

Indians - tepee, feather, deerskin, moccasin, straight, fire and heat and cold, compare housing with our houses.

Road signs - stop, go, fast, slow, curve, map, school bus.

Fall - orange, brown, observation of color changes, temperature change, length of day, leaves fall, trip to farm.

Short units, of perhaps 1-2 days, have centered on:

Valentines day - red, heart, read "I love you," print name.

Easter - egg, up/down, Easter egg hunt.

Fourth of July - parade, flag, birthday, red, white, blue, "This Land is Your Land," star, stripe.

Mother's Day - Mothers, love, help, hand.

Each teacher therapist makes a lesson plan before school begins, and evaluates the plan afterwards. A school book is kept containing these daily lesson plan-evaluation sheets.

Lesson Plan Examples.

Three example lesson plans have been photographically reproduced from the school book and appear below. These document the plan and evaluation of the Pre-Primary group of Wednesday, October 27, 1971, the Primary group on Monday, September 27, 1971, and the Entire Group on Friday, July 16, 1971.

Wed Oct. 27-
PREPRIMARY class

I Sitting poem	ok. all vocalized well
II Day of week MTWThF 12345	Matching symbol for day & number - emphasized saying initial sound tog.
III Weather - dress for weather.	
IV News - using task cards, get each Child to Choose an activity in which he feels he did well today. Discuss in group why success occurred, how can do well again tomorrow.	news Cards worked well, each Child responded to different task - each had choice of 5. Their news seemed pretty accurate & realistic, & took quite a lot of time. I felt it worthwhile to do this.
V Roll Call - children wrote names on paper →	all seem to need facilitation, - Linda & Ted for structure - am working on a way to make these 2 independent.
VI ~~Bag~~ Shapes: game with △ included - 3 Shapes to Choose from. Also - have them Choose 3 same shape, point out 1 different.	didn't do - not time
V More figure-ground work sheets: Varied 1-3 shapes among a number of others - each Child had his own "puzzle" to work on. Sizes were	This again worked well - all found their □'s except Nancy, who missed one. Nancy finds

small, big, medium.
objectives:
Ⓐ Locate all □
Ⓑ Color in □s, emphasizing inside lines. Boundaries.
Ⓒ Count # of □s on each paper, have Child Choose the written number to represent how many he has found.
Group evaluates neatness, dryness of paper.

shapes by comparing actual object c̄ line drawings.
Ted ①, ②, ③ fine
Linda ①, ③ Coloring is just marks within object.
Lori – ①, ②, 3 accurately
Jim 1, 3 ok
needs to observe boundaries more accurately.

Sept. 27, 1971 Mon.
Primary ~~Group~~ Class

I Setting Poem

II News Board

III Roll call

IV Numbers
counting to 10 (numerals)
ages of children
Jeff - 6
LuAnn - 7
Lloyd, Doreen - 8
Melody 12
count to 12 (numerals)
Roll play-doh ball for each year they have lived
Check for correctness

V Calendar
days of week - 7
about 4 weeks - month
new month - Oct.
What happens then?
fun, Halloween, Lloyd's birthday. (8 change to 9)
When start? Friday.

VI Reading
Introduce "th"
see Sullivan Teachers' Guide.
Emphasize
Tuesday - Thursday

I. Jeff the teacher. Insisted on having box to sit on. Was able to handle being in front of class, chose day of week. Vocalization poor. Lloyd chosen by Jeff for next time.

II ok.
discussed V at this time with day of week. Big excitement about Halloween.

III ok. (no overhead used all day.)

IV Lloyd, Doreen unsure of age. I think Jeff knew his.
Play-doh rolling was good activity.
Jeff made progression of balls increasingly smaller. Could not be stopped.
Line of balls interesting to see.
Doreen counted accurately. Could not pull off piece of play-doh, or get hand flat to roll it.
LuAnn - unable to roll with directions only. Count accurate but fooled with the play-doh so that she didn't make the balls.
Melody rolled balls quite independently for her. Rolled 10 balls, but was able to say 2 more needed when class counted her balls
Lloyd - rolling needed much help counted out 7 balls, but knew one more needed after they were counted by class.

A1.9

(over)

V (done with II above)

VI Good interest. Each child given some thread on a spool. Chose color. The method of presentation suggested by book seemed thoroughly good. Several children quite excited to get a new letter. Recall of "t" sound good.

school

July 16, Friday
~~(Entire group)~~
Combined Class

I. Sitting poem I am me Can't you see Though I am small I sit up tall My feet are flat Can you see that? My hands are open And I'm hoping That you can see That I am me.	I. Lori sat unstrapped with head up, hands open & on table throughout the poem and grabbed & rang school bell with right hand.
II. Days of Week, Weather and News	II. Doreen chose the correct day of the week, Nancy the weather symbol and Lloyd, the two words to go with it. Lloyd was confused by the words and meanings for "cold" and "cool." Linda, LuAnn and Tim(?) read the completed sentences with help from Jeff and Doreen. News was about the metal pieces put on Ted's front chair legs and Judy is back from being sick.
III. Names – roll was called by putting each name on the board with some distortion in the spelling (usually one letter changed or the letters mixed up).	III. All children except Ted, Tim and Nancy recognized their names & where the distortions were.
IV. Review of kinds of acts < people, specific animals in a circus with emphasis on clowns – What they look like, wear and do.	The children decided that clowns paint their faces or wear masks, (Mel & Tim) have big ears (Lloyd), large shoes (Linda).

red noses (Ted), smiles or frowns (Lori & Nancy), have cigars (Ted), wear neckties (Jeff), hats (Doreen), and bloomers? (Lu Ann). The children indicated that some of the tricks would be standing on head, somersalting, walking on hands, tripping someone, twisting someone's nose, throwing things. Each child is to be thinking of his trick to perform when they all dress up to be clowns.

V. Hand work-clown faces with eyes cut out and outlines drawn ~~in~~ for nose and smile were chosen by children by color. White sheets of paper with outlines for nose and smile were passed out & children were to color them in red (fill in). The nose & smile were then cut out by the teacher & children glued them into the outlines on the masks.

V. All except Jeff had difficulty staying inside the lines when coloring because the objects were relatively small. Most of the children were able to pick up the noses and smiles and get them onto the mask ~~in~~ close to the right place. It was difficult for some to let go. All were able to press down ("push down hard") to some degree. (Neckties will be polka dotted & folded next time). Masks were tried on & faces looked at in mirrors.

School (A2)

School (A2) is essentially the same as school A1, with the improvement in levels of learning for both groups and addition of a writing plus arts and crafts lesson for the entire group each Friday.

Following the Sullivan Programmed Reading Series, the Primary Group have added b, e, u, o, s, c, h, ng, and ing to the list of letters that they are able to name, recognize and approximate in sound and writing. At present, the children read approximately 34 words combining the above sounds plus those listed in A1 and are able to combine the words to read 3-7 word sentences, both declarative and interrogative. Most of them recognize commonly used punctuation marks and capitals of the following letters: A, E, I, O, U, N, M, P, T, S, H. The children are often encouraged to read aloud following the sentences with their eyes and/or finger across the page or board from left to right.

Each day, work sheets are individually prepared. These are composed of fill-in sentences and problems relating to the particular reading lesson for that day. The children work on these at their own speed, using regular pencils or larger crayons to mark off the correct answers. When they have completed an entire sheet, they are allowed to check their responses by peeling off small pieces of paper in the right margin to reveal the correct answers. Some children are able to complete series of lessons at their own speed using regular workbooks.

In addition to the number work described in A1, simple subtraction using numbers 1-5 is worked on periodically.

Writing Class

The purpose of this class, generally, is to provide experiences where all the children, regardless of the level of proficiency, can practice movements and develop skills necessary for writing. Future goals for many of the children are included in the writing subtest of the ECFAT appearing in Appendix B. These same skills are later reinforced in a corresponding application period consisting of related arts and crafts activities.

The writing lesson begins with the children achieving a good sitting position, which should be maintained throughout. The movements desired are then practiced with sticks, first by the left hand, then by the right as follows:

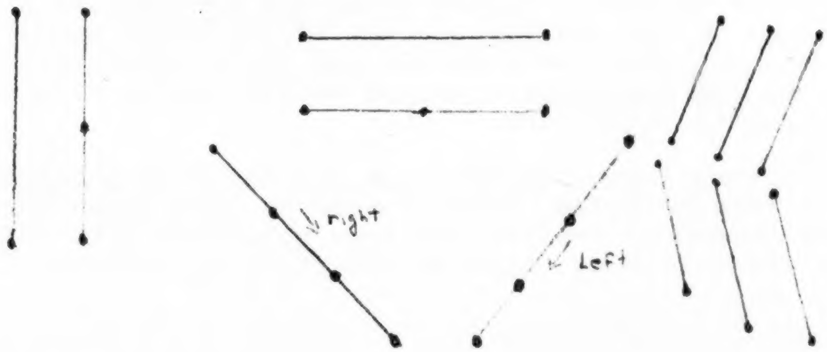
"I grab the stick, 1-5."
"My elbows are straight, 1-5."
"I turn the stick up, 1-5."

(For Writing) "I touch, 1-5." (as child targets on dot)
"Straight down, 1-5, or across, 1-5"

(With Sticks) "I slide it to me, 1-5."
"Away (1-5 if needed).
"I let go, 1-5."

The above sequence is repeated with each hand a second time, only each child uses a writing tool which is best suited to him. These range in size from large "lumber" crayons to small colored pencils. Individually prepared worksheets comprised of graded tasks are completed by each child. In this way, attention is given to perceptual as well as motor problems. Dots are strategically placed on the papers for the children to connect with as smooth flowing straight lines as possible. Size, spacing and directions of lines is considered depending upon whether gross hand or finer finger skills are to be reinforced. Vertical and horizontal lines are required for all the children while some also concentrate on diagonal lines in different directions. In order to draw the lines properly, crossing of the midline and good range-of-motion are necessary. The hand opposite the one writing is used to position and stabilize the paper on the table. Some children need the corners of their sheets taped to the table in order to work optimally.

Language concepts including color, size, left-right and up-down, and eye-hand coordination, etc. are integral parts of this class. At the end of the class, each paper is held up by the teacher therapist to be analyzed by the group concerning the accomplishments and/or improvements to be made in the future. The lesson plan of a typical writing class and samples of exercises appear below.



Arts and Crafts

As previously mentioned, arts and crafts is designed to reinforce and apply movements practiced in writing class and generalize them to other activities. Similar to writing, a general task is presented to the entire group and subsequently broken down into various sub-tasks to accommodate individual differences within the group. The subject matter of the projects usually involves making something to be enjoyed by the children and therefore, becomes quite motivating for them. Language concepts are also learned and reinforced within the activity. Some of the motor skills emphasized include controlled grasp and release, squeezing, targeting, eye-hand coordination, pushing and pulling as well as the finer finger movements. Examples of arts and crafts lesson plans appear below.

Sheri
Kelmer

1

— Friday March 10, 1972
Writing Class

1 Sitting Poem	1. Luken very active. Legs moving. Had to be reminded to sit still often. Lloyd had to be prompted to sit up. Poor sitting at beginning - improvement later.
2 Writing Class - Horizontal a) Intentional thumb work because they were going to paint their dots I make two fists 1-5 I point up 1-5 I touch 1-5 thumb to other hand	2) increased thumbs out. Excellent tapping & rotation to touch top of other hand. Luken did this poorly. Tiff had fair participation for intentional.
regular desk work followed 1) Paper folding to fold paper in half	b) Needs alot of work: None able to put corners together by self or flatten fold down.
c) making dots 1) rotate thumb into ~~pot~~ bowl to get print 2) target on folded line +	c) No one able to place dots exactly on "lines" without verbally demonstrating for. Difficult to maintain feet

rotate down to make dot
Blow dots dry / some attempted this.

c)3 Draw horizontal line
Match color of dots Right hand red. left blue
Jeff + Autumn - paint lines with forefinger

c)4 Clean up
- Tape off - finer finger movements
- Passing papers down (difficult because all did not complete task at same time)
- Crayon boxes

d) Evaluation
(Little time spent on this - done individually. Better if done as a group)

while rotating wrist. A few were able to keep thumb up & move fast because page not receiving the paint. Others found this difficult (see papers)

c3 Matching colors good. Left-right perception good. Only few had to be reminded to use correct hand. Linda, Jeff.

Line work not as good as usual. Difficult to do as a group because some had not made dots, some dots not dry. Intentions done in three sets.

Jeff & Autumn worked very hard on their activity. Rather neat papers. They were almost the last to finish - it kept them busy. Linda & Jim put covers back on crayon boxes. While

[illegible]

	Others attempted to take tape off papers (This needs alot of work) Nancy - did not rip paper although she had to wait
Jeff used pen to write (print) his + LuAnn name on paper	often + at the end were trying to take tape off.
3. Story of the Thumbprint	3.
a) Have Jeff + LuAnn make ten thumbprints on a paper	a) Jeff corrected twice on following directions - had too many prints not 10 - did not use thumb in the beginning - LuAnn good following directions. Her placement of prints could have been better - sometimes placed on top of one another
b) Make up a story of the thumbprint i.e. This thumbprint is a flower teacher Draws the stem + leaves this thumbprint is a Indian " " is dancing " " has curly hair	b) Only had time to do LuAnn's prints. Suggestion: college girls could finish story + have more children make prints. Response + interest

excellent. Time ran out before they could suggest possibilities for thumbprint characters

General Evaluation.

This task chosen because of new tasks in the new hand class - perhaps this could be a Baseline. Generally targeting, rotation, perception of placement, folding, & neatness was poor. Perhaps pointer finger would have been better to make dots with, but they could not maintain the fist or control fingers & hand so as not to smear paint.

Equipment

Spit bowls rather deep to dip down perhaps plate would be better

Powder finger paint - good

[illegible]

Arts + Crafts Class March 3 /7[illegible]

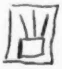
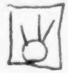
[illegible] had only one [illegible]
All present except for Lori who was on bedrest

1 sitting poem - purpose for good sitting to perform movements the activity needed. Use of owl poem to see how well remembered by group.

2 Introduce Mel's planter + have Lloyd water the flowers + then have him pick out child who sits well to water the plants next. Have the children figure out what today is & then 3 days from now when next watering will occur. Have them look at plants & decide is big or little and if it will take a short or long time for them to grow. Thus because we'll have to wait, it might be good idea to make some flowers in a flowerpot

1 Vocalization okay but not terrific. Poem was well remembered by Tim + Juann.

2. Introduction went well. The children all helped in figuring 3 days from today

5 Goal is motor function
some language work
along with close following
of directions. Directions
will be given step by step
Give each child a paper
with either a circle or square
outline  or 
Tell first thing on paper is
the flowerpot. Give them each
a circle or square & they
must match the outline
with the circle or square
to decide which flowerpot
they want. Have them then
vocalize name of
shape. Have them glue shape (with flat hand pressing down hard)
on the outline making
sure shape fits neatly
in outline. Flowerpot
was a new vocabulary
word.

- Ted had a little difficulty in following directions. For example he was told when to stop & go in performing activity, but he decided for himself the timing of the activity.

- Linda had a difficult time matching the outline to the shape, naming the selected shape & fitting the shape in the outline.

When I pointed to the blue shape during the course of the class only Luann vocalized flowerpot. For the rest of the children I'm

Have the children then count the stems + tell how many flowers they will make. ~~[illegible]~~ Have them decide if their number is the same ~~if~~ or different from the no. of stems I have on my paper. Have the children name the colors of the paper used + decide if colors are all same or different. Also have them count the no. of sheets of tissue paper I give to them + have them decide if they have enough, too much or too little.

sure it was a shape + they could not connect the 2 ideas.

All children could count the stems on their papers + ~~all~~ decided their number of stem was the same as mine. ((Juan + Jeff had dot instead of stems because they drew lines from the dot to the flowerpots. This went well.)) They could name the colors + said all the colors were different.

The counting of the papers to decide if too much, too little + if same as no. of stems was not done because of time.

Have children grab one piece of tissue paper at a time - make a fist + squeeze it together to form a ball. Then have them target into a plate of glue + then target flowers on top of the stem + with flat hand push down hard. Stress the pattern of the colors for the flowers telling the children which color comes first, second third. Tell them to make their flowers look just like mine.

Note: children did not seem to know the stem of a plant.

The motor function of the activity went beautifully. All children could do well independently working at the activity.

Linda, Ted + Jeff had a little difficulty in deciding the pattern of colors - which came first second or third.

Bathing (Bl)

The children are encouraged to grasp the shower spray, while sitting in an upright position in the bathtub and to rinse their bodies without spilling or spraying water outside the tub. Some children soap, scrub and towel-dry their entire bodies as well as washing and rinsing their own hair. Those who are minimally independent contribute to the bathing, drying and dressing process by sitting up in the tub, doing some scrubbing with a soapy washcloth, holding onto the towel and targeting for armholes of pajama tops; while those who are maximally independent complete the entire procedure independently. On bath nights powder and any prescribed medicine or lotions are applied to the skin, and fingernails and toenails are cut.

Hand Washing (Cl)

(At tables before lunch and supper.) Each child is given a wet washcloth in his preferred hand and attempts to wash his face and hands while stabilizing his sitting with his non-preferred hand. The goal is stable sitting while performing hand movements in the midline and asymmetrical hand-to-face movement.

Hand Washing (C2)

Each child lifts his arms and extends his hands above a basin. The goal is to maintain extended fingers and elbows. Soapy water is poured over the hands while they are rubbed together. Rinse water is poured over the hands as they are turned with palms up, the goal being controlled arm and wrist rotation. The child then grasps and opens his towel, and dries his hands as close to the midline as possible.

Hand Washing (C3)

Hand washing (C3) is approached in much the same manner as hand washing (C2) except it involves a progression of increasingly complex tasks which, in general, require a more stable sitting position. While at his place at the table, each child lifts his arms and hands above a large enameled basin (16 inches in diameter and 6 inches tall) placed in front of him. He rests his forearms on the rim of the basin while washing. Soapy water is poured over his hands as he touches the palm of one open hand to the back of the other using a scrubbing motion. The process is repeated with the opposite hand, and then the child rotates his forearms and turns palms up while clean water is poured over to rinse. Various degrees of proficiency exist among the individual children, ranging from merely touching the hands together in the midline to rubbing the hands together in a repetitive circular motion requiring maximum wrist rotation. After rinsing, hands are lifted, one at a time, from the basin to the table, allowing for stabilization while lifting. The child then picks up and unfolds his towel and dries his hands.

Hand washing (C3) affords an opportunity to apply many of the gross and fine motor skills learned during the daily Hand Class.

Morning Hand and Face Washing (C4)

After the children have reached the breakfast tables, each one is given a towel, wash cloth and basin filled with clear, warm water. Soap is applied to wash cloths and each child procedes to wash his face, maintaining the cloth in his preferred hand. He then puts both hands together in the midline, resting forearms on the basin and continues to scrub both hands with the soapy rag. After the cloth has been rinsed in the clean water, face and hands are rinsed and wiped with dry towel, in the manner described above for washing. Stable sitting is emphasized throughout.

When washing has been completed, the children utilize brushes, combs and mirrors to complete the grooming process.

Dressing (D1)

Dressing (D1) is done entirely on the plinths. All children wear button-front shirts and pajama tops, and shorts with an elastic waistband. Training shorts are worn at night in place of pajama bottoms.

There are various levels of independence in dressing among the members of the group. A few of the children are able to dress themselves completely independently except for buttoning and unbuttoning; however, the majority of the children dress themselves with varying degrees of facilitation in the following manner:

Shirts

While lying on his back, the child directs his arms toward and into the armholes of his shirt or pajama top (which is held by a facilitator) and raises his arms with extended elbows above his head. He then lowers his arms while slightly raising his head in order to bring the shirt to the shoulders. Some children may grasp the shirt and pull it over the head. Assistance in pulling the shirt down the back and buttoning is usually required.

In removal, the shirt or pajama top is usually pulled off one arm completely and pulled down to either above or below the elbow of the opposite (easier) arm for the child to grasp and pull off with the free hand or fix on the plinth with the free hand while pulling the other one out.

Pants

The pants are held so that the child can direct his legs toward and into the legholes, after which they are pulled up to various points on the child's legs where he (usually lying on his side) grasps and pulls them up the remainder of the way. Many children require facilitation in maintaining their grasp on the pants.

In removal, the pants are pulled down, usually to some point below the knee where the child kicks or pulls them off. This procedure is often followed with the child on his side in a lying position. The goal here is to pull the pants off the legs while maintaining a good grasp rather than merely kicking them off. This activity affords the child an excellent opportunity to apply functionally the motor skills he has learned in Plinth Series as well as the much needed grasp and release emphasized in Hand Class and Standing and Walking.

Dressing (D2)

As with Dressing (D1), much of the Dressing (D2) is completed on the plinths; however, some is done in a sitting position at either the tables or the plinths. As before, a few of the children are able to complete their dressing and undressing independently, although they may still have difficulty in buttoning and unbuttoning shirts. These children, when not completing the formal dressing tasks, are encouraged to "practice" these finer skills by working with the button, snap and lacing-tying boards which have been prepared. The majority of the children have reached a slightly higher stage of independence than previously (D1) mentioned and, with various degrees of facilitation, proceed in the following manner:

Shirts

Children in a lying position continue to don their tops as described in Dressing (D1) except most are encouraged to grab their shirts with their preferred hands, pulling them over the heads independently. Those children in sitting positions, at table or plinth, after unfolding the shirt in front of them, work at directing their hands into the armholes independently, then grasping and pulling the shirts over their heads. They may require some assistance in pulling the shirt down the back and in buttoning.

In removal, the children in a lying position work at pulling shirts off both arms from a point above one or both elbows. Those who remain in a sitting position grasp the shirt from behind the neck, pulling it forward over the head and off the arms in front, usually while resting the body or elbows on the plinth or table for stabilization. These children also work for complete independence in unbuttoning.

Pants

For the most part, this procedure follows that described in Dressing (D1), except the children are given more time and less facilitation to complete the task with a higher degree of independence. In accordance with this, some of the children have learned to position themselves into a long-legged sit on the plinths, and after targeting their feet into the legholes or pulling the pants over their feet, continue to pull the pants up to the thighs. They then lie down on their backs in order to raise the buttocks and pull the pants up to the waist.

In order to improve color, shape and size discrimination, enhance the self-concept and ability to make choices, all children are encouraged to choose their shirts and pants for the following day.

Eating (E1)

During the three meals the children are seated at plinth-tables, which are adjusted to various heights according to the heights of the children. The tables are arranged in an open rectangular formation to promote a group atmosphere at mealtime and permit the facilitators, who are providing assistance for the non-independent eaters, to monitor those children who are self-feeders.

Regular high-sided vegetable bowls and non-adapted soup spoons are the primary utensils used. Because many of the children have tongue thrusts, the spoons chosen (which are rather large with oval bowls) aid in maintaining the tongue in a downward position during swallowing. There is presently only one child using an adapted spoon, which has a built-up handle to encourage tighter grasp. Two children regularly use a knife and fork or spoon.

Eating is basically an asymmetrical function, requiring stable sitting with hips flexed and symmetrically weighted and feet flat on the floor while using the hands (one for feeding, one for stabilizing the trunk). Hand usage focuses on grasp of the spoon and wrist rotation for "digging" into the dish and in hand-to-mouth movement.

The maximum goal is appropriate use of a conventional knife, fork and spoon in a series of smooth, continuous movements without spilling while maintaining a proper sitting position. The use of a plate rather than a bowl is the ultimate goal along with proper chewing and swallowing patterns.

Since laterality in a severely involved cerebral palsied child is often ambiguous, it is desirable that he develop the use of both hands in alternating functions (one stabilizing sitting while the other completes hand-to-mouth movements). Most of the children alternate the function of right and left hands every other day. In other words, Monday, Wednesday, Friday and Sunday are designated for right hand eating and Tuesday, Thursday and Saturday for the left hand. Some of the self-feeders complete the main portion of the meal using their preferred hands and the dessert with the non-preferred.

Presently, the range of proficiency among the children requiring facilitation during meals includes: those whose main goal, besides stable sitting, is improved chewing, swallowing and lip closure, those who are working on maintenance of grasp and hand-to-mouth movement and those completing the meal fairly independently with facilitation only in stabilizing the bowl on the table and occasionally in stabilizing sitting. Goals for self-feeders range from improved grasp and wrist rotation to appropriate use of knife, fork and spoon, while maintaining a proper sitting position. Self-feeders in every case are encouraged to decrease amount of spillage and to be as independent as possible in moving utensils and wiping off table, hands and face.

After morning and evening meals, the children brush their teeth, rinse their mouths and spit into small enameled pans. All children who are able, brush their teeth independently. Those who are not independent are encouraged to hold the brushes in their hands, bring them to their mouths and complete as much of the scrubbing motion as possible. Spitting teaches voluntary lip closure and improved tongue and cheek control which lead to better swallowing, breathing and speech.

Eating (E2)

Eating for most of the children is essentially the same as in E1, except that at present, no adapted spoons are used, one child has become proficient in eating from a regular plate instead of a bowl, and three regularly use knife, fork and spoon. Dishing up of their own food and spreading and cutting bread and other foods is consistently encouraged among the self-feeders. As before, a higher degree of neatness and independence and minimal or no spillage is emphasized.

Free Play Period (F1)

During this period, the children are encouraged to engage in an activity of their choice, which is usually unsupervised. Several toys and tasks designed to improve various levels and aspects of motor and perceptual development are available to them, e.g., a workbench with which the child can utilize learned hand skills in targeting and rhythmical pounding movements while maintaining stable sitting. There are pegboards and puzzles, in which the intellectual requirement of matching sizes and shapes is coupled with the motor task. A library of childrens' books on a variety of subjects and reading levels is available. To encourage better dressing skills and fine finger movements, button, snap and lacing-tying boards have been prepared. There are also lacing cards, coloring, writing and painting materials available along with play dough and a number of commercially prepared toys. Teacher-prepared homework sheets to supplement school lessons are sometimes utilized during a free play period. A record player and television set are also available. To promote interaction, the children are encouraged to participate in competitive games. Special chores such as passing out towels or bibs may occupy a child during free time. Letters are read and/or written during this period also.

Supervised free play, which includes smaller groups of children participating in a cooperative activity or large group games or activities prepared by the staff-trained college girls, takes place on weekend afternoons.

Group Game Period (Gl)

(To be used during free-periods on weekends, also). This period is a group play period especially designed to (a) promote the development of psycho-social awareness, particularly in the following areas: enhancement of self-concept through group relationships, development of healthy individual and group competitiveness, promotion of interdependence of team-mates working together to attain a common goal, and finally, fostering of creativity in the children within a relatively unstructured activity where positive reinforcement from the group is usually abundant; and (b) afford the children an ideal opportunity for application of learned skills, both motor and educational, in a freely structured activity in a situation which utilizes optimal motivation.

A repertoire of group games has been compiled and adapted for use with groups of physically handicapped children. The teacher-therapist is encouraged to be flexible and creative in adapting these games to specific occasions, or to those movements, objects or language concepts, etc., which she might wish to develop during a particular period. This collection is also suitable for weekend afternoon activity when the program is not carried on in its complete form. The group games are divided into six basic categories:

a. Mimetic games, which make use of role playing, verbal and/or motor imitation (often rhythmic) and provide opportunities for the children to express original experiences;

b. Singing games, which promote group vocalization and verbalization, auditory discrimination, gross and fine motor skills, often in the form of rhythmical movements and application and reinforcement of learned and new language concepts;

c. Games using auditory and visual discrimination,which again include the use of learned motor skills;

d. Active games, which particularly promote the more gross motor skills such as moving about the room (i.e. as in a race) or grasp, release and targeting, etc;

e. Quiet games, which include those usually played at the tables and which often apply skills learned in school;

f. Miscellaneous games, which include many more general games to be adapted for special occasions or to teach particular concepts.

Many of the above-mentioned games are often performed in a sitting position at the tables but some are designed to allow moving about the room. It should also be noted that some are particularly suitable for competitive team games. Below are examples taken from each of the six categories.

a. Mimetic Games

Animal Sounds (trip to farm or zoo)

One child will be "it," representing an animal by either making a sound or movement which typifies the animal. As soon as a child in the rest of the group guesses which animal it is, he raises his hand. The one who is "it" calls on someone until he gets the correct answer. The child who gives the correct answer is "it" the next time. Animal songs can be added.

*The above can also be done as a team game. Split the children into two equal groups who form lines facing each other. One person from each team is given the name of an animal which he imitates(by sound or movement) and his team tries to guess. A time limit can be set on the guessing. Scores of correct guesses are kept on the blackboard, etc., and the team with the most, wins.

Circus Game (can utilize rhythm band)

Begin with a parade, having each child hold and play (vocalize, etc.) a particular band instrument and march by stomping feet on the floor. One child can wear a hat and be the announcer who introduces the acts: "Ladies and gentlemen....presenting..." Several children can be clowns performing physical stunts such as thumbs in and out, arms above head, one foot up, etc. Others can imitate various animals by doing "tricks" or making their sounds. Several variations can be made such as a wild west show with cowboys and indians, a ballet dancer, a tight-rope walker (a child walking across the floor on a black line) etc. Children can clap or pound on the table after each stunt or act.

Building a Fire (Leader reads or tells the story)

1. Children asleep. (Heads down on table)
2. Wake up. Stretch. Deep breathing. Wash face and put shirts on (go through prescribed dressing movements).

3. Go into woodshed for wood. Bring in armful. (Rounded arms).
4. Tear paper. Put it into stove. Strike match and light fire. (leader does in large pail).
5. Blow (everyone blows).
6. Chop wood. (bang on tables).
7. Children, using cups, pour water on the fire to put it out.

A Day on the Farm (Leader reads or tells the story)

1. Breathe in the clean air, heads lifted and arms raised and blow out old air. (several times).
2. Feed chickens. Throw grain alternately with right and left hands.
3. Shake fruit trees. Pick up fruit and eat it (hand to mouth movement).
4. Pick flowers. Blow dandelion seeds.
5. Toss hay down into stalls.
6. Pet horses and dog.
7. Feed all the animals (children can make the sounds and hand motions.)

b. Singing Games

Did You Ever See a Lassie?

Did you ever see a lassie, a lassie, a lassie?
Did you ever see a lassie do this way and that? (Person
who is "it" can choose any movement).
Do this way and that way, and this way and that way;
Did you ever see a lassie do this way and that?

Choose a child to point out any circle in the room as you sing to the tune of"Did you Ever See a Lassie?" Use the name of the child in the song.

Did you ever see a circle, a circle, a circle?
Did you ever see a circle?
Please show us one now.
O Mary, O Mary, O Mary, O Mary,
Did you ever see a circle?
Please show us one now.

This game can be adapted to any shape.

Looby Loo

I put my right hand in, I put my right hand out,
I give my right hand a shake, shake, shake
And turn myself about.

Here we dance looby loo, here we dance looby light,
Here we dance looby loo, all on a Saturday night.

I put my left hand in, etc.
I put my two hands in, etc.
I put my right foot in, etc.
I put my left foot in, etc.
I put my two feet in, etc.
I put my right ear in, etc.
I put my left ear in, etc.
I put my head way in, etc.
I put my whole self in, etc.

c. Games Using Auditory and Visual Discrimination

Blind Child

One child is chosen for the Blind Child and is blindfolded, He slowly counts to ten , and at ten he advances and touches one of the children in the group. He tries to guess the name of the one touched by feeling of his face, clothes, etc. The one whose name is correctly guessed becomes blind child.

A variation of this provides that the blindfolded child points a wand or stick at some child in the circle,ask his questions, and guess his identity by the voice. Another form provides that the child pointed at shall make some certain sound, as grunting, barking, or the like. The blindfolded child guesses the player's identity from this sound, etc.

Logomachy

This interesting game requires a large number of cardboard letters. The letters are placed face down on the table, and each player draws one. The first play is given to the player who draws A, or the letter of the alphabet nearest A. Then, beginning at his left, each player places his letter, face up, on the table in front of him. Each draws again and places the letter in front of him. Any time that a player can make a word out of the letters in front of him, he does so and "retires" the word so made. If a player wishes, he may draw from the letters in another player's lot, if he sees among them one that would complete a word. This is done in his regular turn instead of drawing from the pile. At any time, a player may take a word that has been made by another, if he can change the word by the addition of a letter or a word in his possession. For instance, if he has an "e," he may appropriate his neighbor's "top," and make "poet" out of it; or he may add "skin" to "seal" and make "sealskin." The player having the largest number of words at the end of a given time wins.

Numbers Change

Players sit in an open rectangle and number off. A player in the center calls one of the numbers (or for more difficult problems, calls a combination of numbers - add or subtract - which equals that number). The person who has that number must indicate so by pounding on the table, etc. If that person guesses correctly, he changes places with the center player, who takes over his number and so on.

d. Active Games

Shoot the Rabbit

Blocks or other articles are stacked up in the center of a table and the children sit around the table. One child is given a ball, and he rolls it toward the center, trying to knock over the articles. If he is successful, he stacks them up again. The next child takes his turn, and this continues until all the children have had a turn.

Bean Bag In The Basket

Children sit at a table and toss several bean bags toward a large wastebasket or large basin (not more than four or five feet away) to see how many will drop in. Score must be kept and the child who scores the most, wins. This can be done with two teams also.

Huckle Buckle Bean Stalk

A card with a number or color in it is used as the object to be hidden. One child leaves the room or closes eyes with back turned, as the card is hidden within the room. As the child enters the room, all of the others start chanting "Huckle Buckle Bean Stalk" in a medium loud tone. The tone changes to a louder one if the one searching starts in the wrong direction, and the voices soften as the searcher gets closer to the object. Upon finding the card, he must identify the number or color. If correct, he may choose the next child to leave the room, and choose a child who may hide the card for the next game.

Hot Potato (or relay)

A light-weight whiffle ball (or stick, etc.) can be used as the potato. The children can sit at the tables in an open rectangle with two children who can walk at the end places. They are divided in half to make two teams. A ball or "potato" is given to each of the two people at the middle table and on a specified signal, is passed from one child to another until it reaches the end person on each team. The ball or potato is very "hot" so the children try to pass it on as quickly as they can. The first team that gets it up to the end person, wins. This game can be done as a more active relay race by having the end persons, when they receive the ball, get up and walk back as quickly as they can, and give it to the middle persons. This can be done a designated number of times and team that gets the ball to the end person first, wins.

Blowing

A ping-pong ball or balloon can be blown from child to child in a relay fashion explained in the "hot potato" game, the first one of the two teams to get the ball to the end person, wins. The children may also just blow the ball back and forth randomly to each other or "tag" a particular person who is "it," with the ball. "Tag" can be played with a whiffle ball also, by either batting it with their hands at the tables or kicking with feet on the carpet.

e. Quiet Games

Hen and Chickens

Children are seated at the tables. One child is selected for the hen and takes her place in the center. One child is doorkeeper. The teacher or a third child walks softly about the room selecting chickens by tapping them as she passes around the room. When she is through choosing, she sits down; and all the children place their heads on the tables, hiding their faces in their arms. The doorkeeper then gives a signal for the Mother Hen to come in. She goes about the room saying, "Cluck, cluck." Only those children who have been chosen as chickens answer, "Peep, Peep," still keeping their heads down. The hen listens, trying to locate her chickens. When sure, she taps the child on the head. If she selected the right child, he sits up in his seat; if the wrong one, he still hides his head. When the hen has found all of her chickens, she selects a new hen to take her place.

Circus Pony Number Game

Objective: To help children sight numbers from 1-10, to help children associate correct value, and to further develop attention span.
Procedure: Children sit in semi-circle as in circus tent. The teacher chooses trick pony, drummer, and trainer. The teacher explains to the "audience" (children) that, if the pony nods or paws the correct number he sees on the flash card, they may clap for him. Place the drummer in position of circus band; the pony faces the trainer.
Game: Trainer holds up flash card to the "audience" so that they may see the number; then to pony, but not to drummer (if drummer knows the number, he has the tendency to count and drum ahead of the pony). The trainer walks over to the pony in the center and touches head if he wants the pony to nod (foot), if he wants him to paw correct number very slowly, so that audience can see and count to selves as the pony performs; drummer beats at each count (1). If the pony performs correctly, audience claps or pounds on the table; if incorrect, they do not clap.

f. Miscellaneous Games

Dominos (Picture or Number)

Children sit at tables and are given a designated number of blocks or dominos. A leader or teacher puts the correct ones together, as guessed by the children, on a center table or reproduces them on the blackboard.

Totem Pole (Arts and Crafts)

Totem pole(s) can be constructed by the children as a group with some pasting, some coloring, some pounding nails, painting and tearing. Materials used can be tin cans, wood chunks, paper plates, paper bags, etc.

Store

Children sit at tables in open rectangles. A large table in the middle is designated as the "store" and contains many objects, etc., chosen for learning various language concepts or physical movements, etc. One child is chosen to be the storekeeper, with the teacher, who sells the objects. This person must also set the prices on objects, make sure the buyer pays the correct amount, and possibly make correct change. The children take turns being the store-keeper. Each child is given a designated amount of money to spend at the store and must keep track of how much he has, how much he can buy with it and the shapes and kinds of objects he wishes to buy (or trade). The children take turns going up to the store. Variations can be made. This activity has proven to be a very motivating one for our children and a good learning activity.

Fishing Game

This is a very versatile game which can be used for teaching almost any language concept by using categorization, visual and auditory discrimination, classification, and several types of movement with hands, arms and heads. A long stick constructed with a thicker red stick handle (for grabbing) and a long string with a magnet attached to the end on the other end can be used as a "fishing pole." A box filled with tagboard cards cut in different shapes or with pictures on them, etc., of desired stimuli are used. The cards have paper clips glued on the back of them to make them adhere to the magnet. Each child can have a turn to "fish" by putting the string and magnet into the box without letting go of the handle and pulling it out again. He can name, show, put in a pile, etc., the objects he got as a fish. Several variations of these procedures can be used.

Hand Class: General Description & Rationale (H)

The second major daily activity, the Hand Class, consists of a series of tasks similar to those performed in the Plinth Series, but carried out while the child is sitting rather than lying. The purpose of any Hand Class is to teach the free and functional use of the hands, arms and upper trunk while sitting -- i.e., while maintaining a stationary symmetrical lower body alignment with the hips, knees and ankles well flexed and the weight evenly distributed on both legs and feet as well as on the buttocks.

Total Body Orientation.

As in the Plinth Series, all intentions in the Hand Class refer to a specific movement (e.g., "I make two fists."), and the child's attention is directed to the position of his entire body while he performs the stated task. In other words, clenching both hands into fists symmetrically and with thumbs abducted (over rather than under the fingers) is only a part of the requirement for "I make two fists." It is further a reminder for proper hip, leg and foot position in sitting and a maintenance of extended elbows and erect upper trunk while making two fists. This major emphasis on a proper sitting position is a consistent factor throughout the Hand Class series.

Movement Variations.

Any one of a large number of hand and arm movements in several planes may be included in the Hand Class. Since stable sitting is the over-all goal, movements to the side, in front of the body (particularly in the midline) and above the head are all desirable and necessary to teach functional use of the upper limbs and trunk. Depending upon the group, the movements chosen may be related to fine motor skills and swinging movements or gross, less complex movements with more stability. Sticks, cups, spoons and other special devices, may be incorporated at appropriate times to provide motivation through an understanding of the functional applications.

A Hand Class provides an opportunity to learn any and all skills concerned with movement while in a sitting position, and is constructed to teach rhythm, balance and increased perceptual awareness of body image as well as improved motor skills. The stated intention may be applied directly to an impromptu game, song or poem during the

Hand Class period. Moving the arms rhythmically to the side and back to the midline with elbows extended can be applied in keeping time to the song, "Row, row, row your boat." A finger play may apply learned fine motor skills in much the same way.

Range of Abilities.

Various stages of sitting and hand use may be incorporated into a single series. For example, one individual in a given group may require maximal support for independent sitting and therefore may sit facing a plinth-table and hold onto the slats during the intention, "My hands are flat;" another individual in the same group may be capable of sitting securely on a box while placing and maintaining open hands on his knees during the same intention.

Task Modification.

Modification of the various tasks are carefully designed to gear the requirements for successful completion to each individual's specific motor performance level. In other words, the task performed during an intention may be upgraded to include repetition, the introduction of rhythm, added equipment or movement of another body part. For example, touching the palm of the open left hand to the back to the open right hand with extended elbows may be repeated rhythmically five times, swinging the arm in a wide arc before each touch. The same intention is used ("I touch. 1,2,3,4,5,"), but the latter task is designed to improve sitting in a child who is already very functional, but needs refinement of sitting balance skills. (See upgrading - definition of terms in introduction). In much the same way, a task may be simplified for the individual to allow for independent successful completion. Raising the arms for "I lift up" may be made easier for the less capable individual by making the requirement the grasp of a higher rung of a ladderback chair. (See simplification - definition of terms section in introduction).

Applications.

The movements chosen for any specific Hand Class depend largely upon the goals for the group. Since nearly all activities of daily living depend heavily upon the use of the hands and arms, the movement stated in the intention may have a number of functional applications. The intention, "I touch my shoulder," for example, serves to improve performance in any asymmetrical activity that requires crossing the midiine. Specific examples include eating, writing, crayoning, removing the shirt, etc. Thus, a Hand Class may include opportunities to improve a large number of functional motor skills without concentrating on any one specific application.

Perceptual Awareness.

The sitting position assumed by the child in Hand Class gives him an increased understanding of the "normal" position for carrying out most hand activities. Sitting upright allows him to move his head and eyes to observe the various happenings around him in the room. It frees his hands for the most part and increases his awareness of the potential use he may make of his upper limbs in such functions as eating, drinking, schoolwork, etc.

Hand Class (H1)

The major emphases of this specific Hand Class are the movements required for eating and drinking. Both symmetrical and asymmetrical hand-to-mouth, face, or head movements are stressed. Forearm rotation for grasp of a double-handled cup is also includes as well as lifting of both arms symmetrically while maintaining grasp on a stick. Asymmetrical wrist and forearm rotation while maintaining grasp with one hand (for eating) is the goal for the final portion (Intentions 28-30).

All children are seated at tables, and adaptive chairs are used for the following children:

Melody - winged chair (sandbagged).
Lori - winged chair with belt (sandbagged).
Doreen - chair (sandbagged).
Nancy - chair (sandbagged) and small chairs at sides.
Lloyd - small chairs at sides and chair (sandbagged).

The room copy shown below and the corresponding documentation chart give more specific information regarding the progression of the movements, their rationales and applications.

HAND CLASS (H1) March, 1971

I put my hands flat on the table. 1-5
I stretch my elbows. 1-5
I push my hands down hard. 1-5
My feet are flat. 1-5

I turn my hands over, over, over.
I stretch my fingers. 1-5
I put my head down in my hands. 1-5
(GAME AND POEM)

I stretch my arms to the sides. 1-5
I turn my hands over, over, over.
I stretch my fingers. 1-5
I put my hands up on my head. 1-5

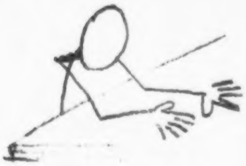
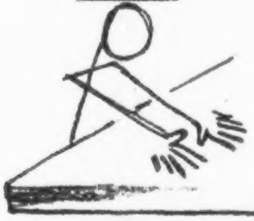
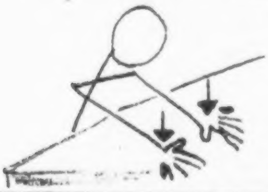
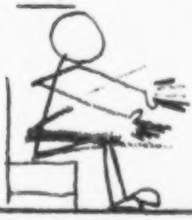
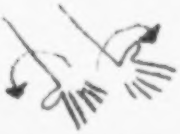
I put my hands flat. 1-5
I grab my sticks. 1-5
I slide my sticks out to the sides. 1-5
Together - out - together - out.
I lift my sticks up - down - up - down.
(SONG)
I touch my sticks to my head. 1-5
I let go. 1-5

My hands are flat. 1-5
I point my right hand to the ceiling. 1-5
I pinch my nose. 1-5
My hands are flat. 1-5
I point my left hand to the ceiling. 1-5
I pinch my nose. 1-5
(POEM)

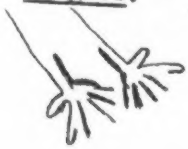
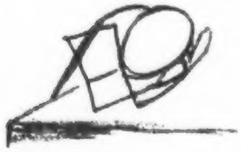
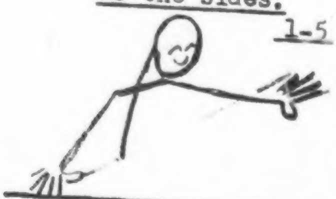
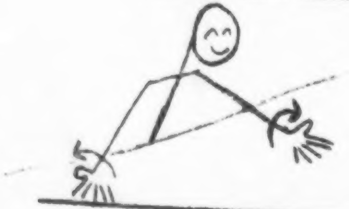
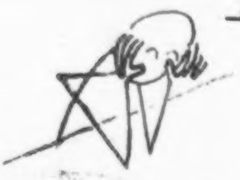
I make two fists. 1-5
I point my thumbs to the ceiling. 1-5
I slide my fists to me-away-to me - away.

I grab a stick. 1-5
I stand my stick up. 1-5
I bring my stick to me - away - to me - away.
I bring my stick to my mouth - ahhhhh.
Mmmmmmm (away).
I grab my stick with both hands. 1-5
(SONG)
I let go. 1-5
Water, etc.
(GRACE)

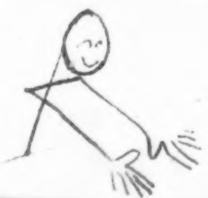
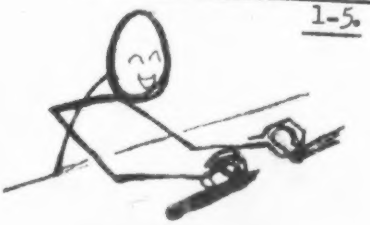
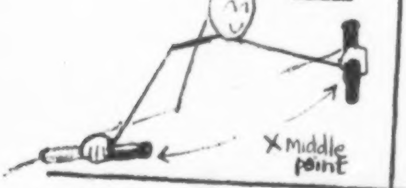
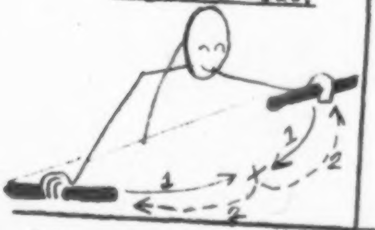
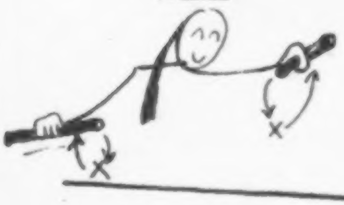
DOCUMENTATION CHART (H1)

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
1. I put my hands flat on the table. 1-5 	"Stretch your fingers." "Keep your head in the middle." "Thumbs out."	Actively and bilaterally abduct and extend fingers and thumbs with palmar surface firmly on table.
2. I stretch my elbows. 1-5 	"Keep your hands flat." "Get your arms as straight as you can."	Maximally extend elbow, partial shoulder girdle retraction.
3. I push my hands down hard. 1-5 	"Push on the table as hard as you can." "Keep your elbows straight." "Lean forward."	Actively flex trunk with cocontraction of trunk support muscles with (1) and (2) above. Firmly press palmar surfaces of both hands onto the table while elbows remain extended.
4. My feet are flat. 1-5 	"Get your heels down on the floor." "Both feet flat."	Dorsiflex ankles at 90° or less.
5. I turn my hands over, over, over. 	"Turn your hands so you can see your palms." "Keep your feet flat."	Outwardly rotate forearm.

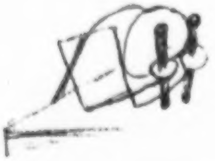
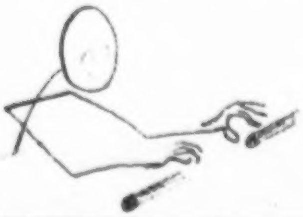
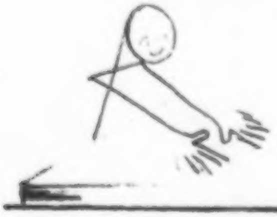
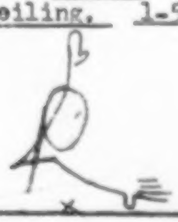
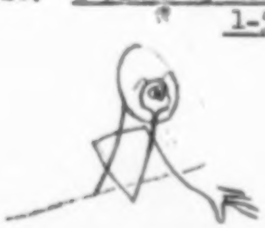
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches voluntary inhibition of spastic finger flexion with adducted thumb. Prepares for grasp and prehension.	Voluntary grasp & release in general. Stabilizing an object. Balancing upper trunk.	
Conscious inhibition of Moro reflex, ATNR pattern, or spastic flexion, rotation and adduction to body. Prepares for use of hands in midline, reaching and grasp.	Support and balance of upper trunk. Reaching for objects sitting at table. Standing with support.	
Teaches conscious inhibition of total flexion due to reflexes. Promotes balance and stabilization of upper trunk.	Support of trunk during sitting or standing. Writing. Coloring.	
Teaches conscious modification of flexor withdrawal, stepping reflex, extensor thrust. Prepares for weight-bearing. Promotes stable lower trunk for sitting.	Free sitting. Standing. Transfer to other furniture for sitting.	
Promotes symmetrical outward rotation of wrist and arm. Teaches conscious inhibition of Moro reflex, STNR, spastic finger flexion.	Eating. Grooming. Toothbrushing. Drinking. Handwashing. Standing between two chairs.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
6. I stretch my fingers. 1-5 	"Keep your hands turned over."	As in (1) without assistance of table surface.
7. I put my head down in my hands. 1-5 	"Keep your hands on the table." "Touch your forehead to your hands." "Are your feet flat too?"	Voluntarily flex neck and upper trunk. Maintain partial shoulder protraction.
8. I stretch my arms to the sides. 1-5 	"Keep your elbows straight." "Slide your arms out to the sides."	Extend and smoothly abduct arms. Retract shoulder girdle.
9. I turn my hands over, over, over. 	"Keep your elbows straight." "Head in the middle."	As in (5), maintaining shoulder abduction.
10. I put my hands up on my head. 1-5 	"Keep your hands open and your fingers stretched." "Bring your arms up from the side."	Maximally abduct shoulder, flex elbows, and extend fingers with thumbs abducted.

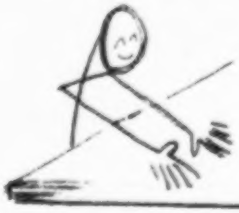
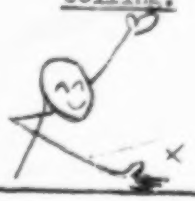
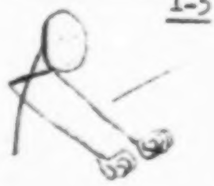
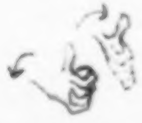
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches conscious inhibition of spastic finger flexion. Promotes functional use of hand with thumb abducted.	Receiving an object in hand. Handwashing. Grooming.	
Teaches conscious inhibition of Moro reflex, ATNR, and total flexion pattern; promotes functional flexion of necks.	Grooming. Washing. Dressing.	
Conscious inhibition of spastic adduction and internal rotation. Promotes symmetrical arm extension and trunk control.	Stable sitting. Sitting balance. Eating. Standing between 2 chairs.	
Teaches voluntary inhibition of spastic shoulder adduction and elbow flexion. Promotes enlarged spatial concept of area around body. (See #5)	Dressing.	
Teaches voluntary inhibition of Moro reflex, ATNR, and promotes balance of upper trunk.	Grooming. Dressing. Bathing.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
11. I put my hands flat. 1-5. 	"Stretch your fingers." "Keep your head in the middle." "Thumbs out."	Actively and bilaterally abduct and extend fingers and thumbs with palmar surface firmly on table.
12. I grab my sticks. 1-5. 	"Grab both sticks." "Keep your thumbs out."	Flex fingers bilaterally. Abduct thumbs; rotate thumbs; grasp.
13. I slide my sticks out to the sides. 1-5. 	"Move both arms to the side." "Keep your elbows straight."	Maintain grasp, extend and abduct arms. Retract shoulder girdle.
14. Together--out --together--out. 	"Keep grasping your sticks."	Abduct, then adduct arms in smooth flowing motion.
15. I lift my sticks up. Up. Down. Up. Down. 	"Keep your sticks in front of you." "Elbows straight." "Keep grasping your stick."	Extend arms at shoulders. Maintain grasp.

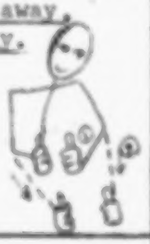
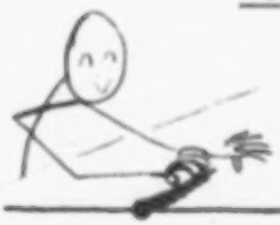
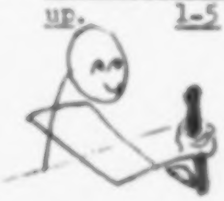
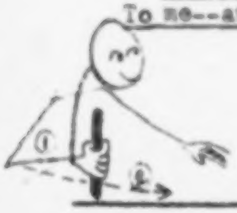
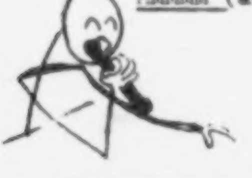
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Reinforces maintenance of stable sitting. Promotes re-establishment of position if not maintained.	Voluntary grasp and release in general. Stabilizing an object. Balancing upper trunk.	
Teaches voluntary inhibition of ATNR. Promotes bilateral use of hands at midline.	Drinking. Eating. Grasp and release in general.	
Conscious inhibition of spastic adduction and internal rotation. Promotes symmetrical arm extension and trunk control.	Standing. Walking between 2 chairs. Stable sitting.	
Promotes bilateral coordination, and an enlarged concept of body space. Promotes sitting balance.	Free sitting. Game play-dexterity in movement. Standing. Walking.	
Teaches voluntary inhibition of Moro reflex. Promotes trunk balance. Prepares for free sitting.	Free sitting. Handwashing Walking with chair as support.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
16. I touch my sticks to my head. 1-5 	"Keep both hands on your sticks." "Touch your head with your sticks."	Abduct, externally rotate shoulders. Flex elbows;maintain grasp.
17. I let go. 1-5 	"Stretch your fingers, open your hands." "Keep your sticks on the table."	Flex wrists, extend fingers, abduct thumb.
18. My hands are flat. 1-5 	"Stretch your fingers." "Keep your head in the middle." "Thumbs out."	Actively and bilaterally abduct and extend fingers and thumbs with palmar surface firmly on table.
19. I point my right hand to the ceiling. 1-5 	"Lift your right straight arm above your shoulder."	Retract right shoulder. Maintain extended right elbow and fingers.
20. I pinch my nose. 1-5 	"Keep your head in the middle." "Use your pointer and your thumb to pinch." "Use your right hand to grab your nose."	Abduct right shoulder, flex right elbow, while maintaining extended left arm.

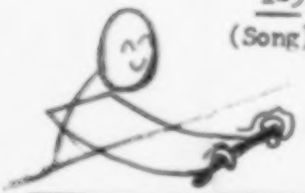
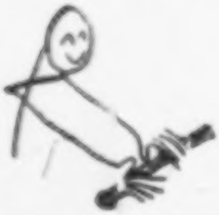
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes symmetrical use of hands in functional movement. Promotes trunk balance.	Grooming. Dressing. Drinking. Bathing.	
Teaches inhibition of spastic finger flexion. Promotes voluntary release.	Eating. Drinking. Standing. Transfer of objects from hands.	
Teaches voluntary inhibition of ATNR. Promotes bilateral use of hands at midline.	Voluntary grasp & release in general. Stabilizing an object. Balancing upper trunk.	
Enlarges range of motion. Promotes greater spatial awareness.	Grooming. Bathing. Toothbrushing.	
Teaches inhibition of ATNR. Promotes hand-to-mouth movement with one arm.	Eating. Toothbrushing. Bathing. Grooming.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
21. My hands are flat. 1-5 	"Stretch your fingers." "Keep your head in the middle." "Thumbs out."	Actively and bilaterally abduct and extend fingers and thumbs with palmar surface firmly on table.
22. I point my left hand to the ceiling. 1-5 	**"Lift your left straight arm above your shoulder."**	Retract left shoulder girdle, maintain extended left elbow and fingers.
23. I pinch my nose. 1-5 As in 20 - left hand.	"Keep your head in the middle." "Use your pointer and your thumb to pinch." "Use your left hand to grab your nose."	Abduct left shoulder, flex right elbow, while maintaining extended right arm.
24. I make two fists. 1-5 	"Keep your thumbs outside your fists."	Flex fingers bilaterally, abduct thumbs.
25. I point my thumbs to the ceiling. 1-5 	"Turn your thumbs up."	Rotate forearms outwardly, maximally abduct thumbs.

RATIONALS FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches voluntary inhibition of ATNR. Promotes bilateral use of hands at midline.	Voluntary grasp and release in general. Stabilizing an object. Balancing upper trunk.	
Enlarges range of motion. Promotes greater spatial awareness around body.	Grooming. Bathing. Toothbrushing.	
Teaches inhibition of ATNR. Promotes hand-to-mouth movement with one arm.	Eating. Toothbrushing. Bathing. Grooming.	
Promotes functional grasp. Prepares for grasping support in sitting or standing.	Standing with support. Grasp in general. Drinking. Eating.	
Promotes functional use of hands. Teaches conscious inhibition of spastic finger flexion with thumb adducted.	Drinking. Grooming. Eating.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
26. I slide my fists to me--away. To me--away. 	"Move both arms at the same time." "Keep both fists."	Rotate forearms, maximally abduct thumbs, and flex and extend elbows smoothly.
27. I grab a stick. 1-5 	"Keep your other arm in front of you." "Open your hand to grasp the stick."	Extend fingers and abduct thumb; flex fingers and thumb to grasp.
28. I stand my stick up. 1-5 	"Look at your stick." "Keep grabbing."	Rotate forearm outwardly; maintain grasp.
29. I bring my stick to me--away. To me--away. 	"Move both arms at the same time." "Keep both fists."	Rotate forearms, maximally abduct thumbs, and flex and extend elbows smoothly.
30. I bring my stick to my mouth. - ahh. Mmmmm (away). 	"Keep your other arm straight." "Lift your elbow off the table if you can."	Abduct shoulder, flex elbow, rotate wrist outwardly. Alternately flex and extend elbow, maintaining grasp.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches conscious inhibition of ATNR, Moro reflex. Promotes coordination of movement toward midline.	Eating. Writing. Drinking. Dressing.	
Teaches voluntary grasp and release. Promotes asymmetrical use of hands, and sitting balance.	Eating. Bathing. Writing. Dressing. Sitting.	
Teaches functional wrist rotation with grasp.	Eating. Grooming. Washing.	
Teaches conscious inhibition of ATNR, Moro reflex. Promotes coordination of movement toward midline.	Eating. Writing. Dressing. Drinking.	
Promotes smooth coordination in hand-to-mouth movement. Teaches conscious inhibition of ATNR.	Eating. Dressing. Toothbrushing. Grooming.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
31. I grab my stick with both hands. 1-5 (Song) 	"Head in the middle." "Are your feet flat?" "Thumbs under the stick." "Straighten your elbows."	Extend fingers, then flex them; abduct and flex thumb. Extend elbows.
32. I let go. 1-5 	"Let go with both hands at once." "Look at the stick."	Extend fingers; abduct and extend thumbs.
		TP

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches inhibition of ATNR. Promotes symmetrical use of hands in midline.	Eating. Drinking. Sitting.	
Teaches inhibition of ATNR. Promotes asymmetrical use of hands in midline. Promotes voluntary release.	Drinking. Eating. Pushing off plinth.	

Hand Class (H2)

Following the general goals for which all Hand Classes are designed, the following series centers around the use of the hands, arms and upper trunk while maintaining a stable sitting position. Individual adaptations (task modifications) are made primarily to ensure that only minimal support is given, and the sitting posture is maintained as independently as possible while the intended movements are being made.

Specific goals for this series are those functional movements involved in handwashing, eating and drinking. There is also a major emphasis on weight bearing on the hands and arms in preparation for pushing off the plinth and standing. Both symmetrical and asymmetrical grasp and release patterns are specific goals for the stick tasks.

The corresponding documentation chart fully explains the rationale, applications and procedures for this specific activity. The group begins the series in sitting with chairs arranged in a semi-circle and children facing the lead conductor. Those children at tables are behind those in free sitting. For those individuals who are incapable of stable free sitting either ladderback chairs are provided in front or at the sides for support or, the child is seated at a table. Individual adaptations range from sitting on a box without support to sitting in a non-adaptive chair at a slatted plinth which can be grasped for support.

All diagrams on the documentation chart picture the child who performs the movements sitting at a table. Those children who sit freely without support use their knees in place of the table for supporting and weightbearing on hands and arms (pushing down hard, putting hands flat, fixing elbows, etc.) Those children using ladderbacks as support use a rung of the ladderback for support in place of the table.

The children are placed as follows:

Nancy, Lori, Melody, Lloyd & Doreen - at table, no adapted chairs.
Linda, Ted - free sitting in their own chairs.
LuAnn - free sitting on a box.
Tim - two ladderbacks (one on each side).
Jeff - on a box with one ladderback in front (for intermittent support only).

ROOM COPY

HAND CLASS - July 26, 1971

My hands are flat 1-5	
My feet are flat 1-5	
I slide my feet back 1-5	Close to chair - arms forward.
My elbows are straight 1-5	
I make two fists 1-5 OPEN	Fingers straight. Should be done a few times. Stress saying O-pen.
I push down hard 1-5	Hand flat and elbows straight.

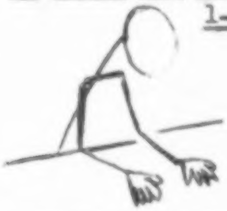
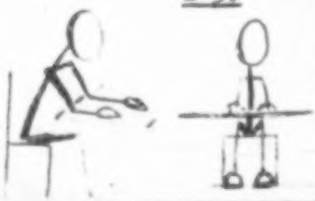
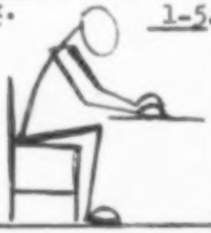
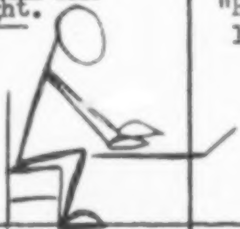
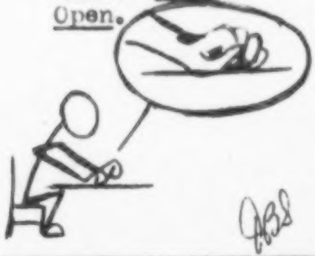
I touch 1-5 Apart	Left hand on right. Stress targeting on back of opposite hand with open hand and both elbows straight. Stress saying A-part.
I touch 1-5 Apart	Right hand on left
I cross 1-5 Apart.	Left foot over right. Cross just ankles keeping other foot flat and arms straight on table.
Same with right foot.	
My feet are flat 1-5	
I push down hard 1,2,3,4,5	Left foot first for five counts. Goal get heels down and kept arms forward.
Same with right foot.	

My hands are open 1-5	Fingers and elbows straight.
I touch 1-5 And down	Resting chin in open hands. Care given so fingers are straight, wrists bent and elbows on table. This should be repeated and position maintai~~o~~ned.
To my shoulder 1-5 And down	Left hand to right shoulder. Goal keeping other arm straight, and flexed elbow on table and fingers on that hand opened over shoulder. Care given to wrist position.

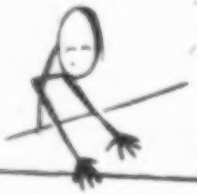
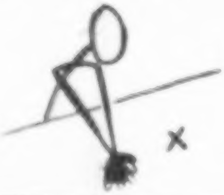
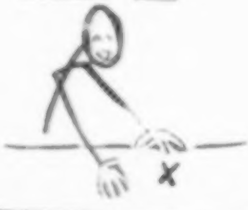
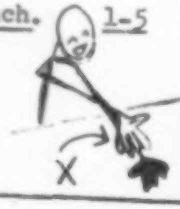
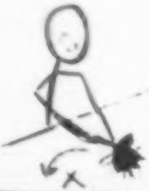
Same with opposite hand	
My elbows are straight 1-5	Care for flat hands - flat feet
Hands over, over 1-5	Leaders vocabulary should include verb turn. Elbows should remain straight. Fingers open.
And back	
I make two fists 1-5	Thumbs out
I lift up 1-5	They lift up only to the point that they maintain straight elbows and feet flat.
And down	

I grab my stick 1-5	With both hands. Thumbs should be under stick.
My elbows are straight. 1-5	Care so wrists are down/
Lift up, 1-5	Feet flat, elbows straight, Repeat.
And down.	
I let go 1-5	With one hand only. That hand remains forward and flat on table.
To my mouth ah, ah, mm (away)	Maintain grasp. Bring stick to head, Repeat.
I let go. 1-5	

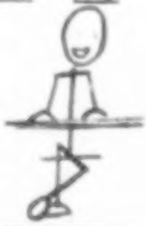
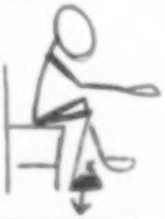
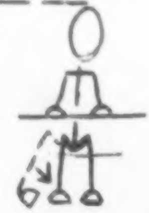
DOCUMENTATION CHART (H2)

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
1. My hands are flat. 1-5. 	"Stretch your fingers." "Keep your heads up."	Extend fingers and abduct thumb to place palmar surfaces of both hands on table or knees.
2. My feet are flat. 1-5. 	"Make sure your feet are in front of the chair." Keep your heels down." "Make sure your feet aren't crossed."	Flex hip, knee and ankle to place plantar surfaces of both feet on floor. Rotate knees so feet are parallel.
3. I slide my feet back. 1-5. 	"Keep your feet flat as you slide back." "Do not put your feet under the chair." "Keep your knees (together/ apart)."	Flex knees and slide flat feet close to chair.
4. My elbows are straight. 1-5. 	"Keep your hands open." "Head in the middle, look up."	Maximally extend both elbows with hands at shoulder width. Rotate shoulder from in to midpoint.
5. I make two fists. 1-5. Open. 	"Thumbs on the outside" "Squeeze."	Flex and extend fingers while thumb remains abducted.

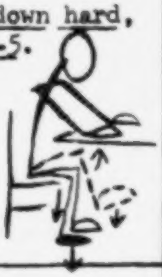
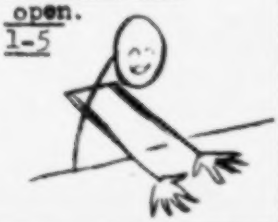
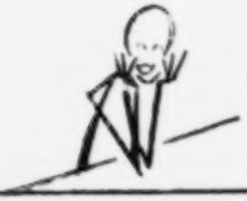
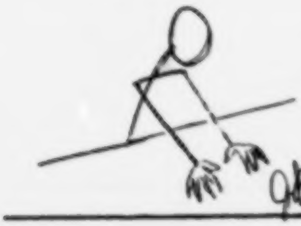
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS ON INTENTION FOR INDIVIDUALS
Teaches voluntary inhibition of spastic hand flexion with adducted thumb. Prepares for grasp and thumb abduction.	Voluntary grasp and release in general. Stabilizing an object, or paper (as in writing.)	Jeff, LuAnn, Ted - put hands on knees. Tim - right hand over knee, the other grasps rung of I.B. placed at his side. Linda - hands on outside of knees pushing knees together.
Teaches conscious modification of flexor withdrawal, stepping reflex, extensor thrust. Prepares for weight-bearing on legs. Promotes stable lower trunk for sitting.	Functional free sitting. Preparing to stand or transfer to other furniture for sitting.	
Teaches conscious inhibition of extensor thrust pattern and stepping reflex, promotes hip, knee and ankle flexion for stable lower trunk and weight bearing on the legs.	Functional free sitting. Standing.	Tim - grasps rungs of L.B. while slides feet back.
Teaches conscious inhibition of Moro reflex, ATNR pattern, and spastic flexion, rotation and adduction to body. Prepares for hands in the midline, and grasp.	Handwashing. Support of upper trunk (stabilization.) For sitting at table, free sitting, or standing.	
Teaches conscious inhibition of spastic finger flexion with thumb adducted. Promotes grasp pattern with thumb in opposition, and some wrist extension.	Grasp and release in general. Grasping ladder-back chair, for support in standing. Holding eating utensils.	Tim - left fist on his left knee, other hand grasps rung of L.B. Jeff - fists on knees.

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
6. I push down hard. 1-5 	"Lean forward- Push on the table or your knees." "Keep your hands flat while you push."	Push symmetrically on firm surface with maximally extended elbows, fingers and thumbs. (also abducted)
7. I touch. 1-5 	"Keep both arms straight." "Lift your left hand and put it on top of your right. "Keep your hands open." "Head in the middle - watch your hands."	Place palmar surface of left hand to dorsal surface of right hand while both elbows remain extended.
8. Apart. 1-5 	"Put your left hand back on the table." "Keep your elbows straight." "Hands open." "Look at your hands."	Replace left hand flat on table as in 6.
9. I touch. 1-5 	"Lift your right arm up and touch your left hand." "Keep your elbows straight." "Head in the middle." "Hands open(fingers straight)."	Place palmar surface of right hand on dorsal surface of left hand while both elbows remain extended.
10. Apart. 1-5 	"Look at your hands." "Put your right hand back on the table." "Keep your elbows straight." "Hands open."	Abduct right arm, to replace hand on table maintaining extended fingers and abducted thumb.

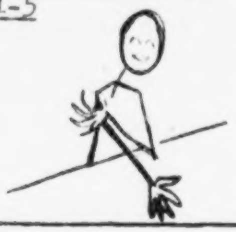
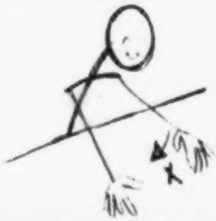
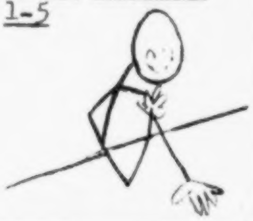
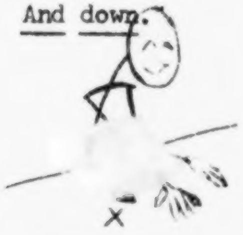
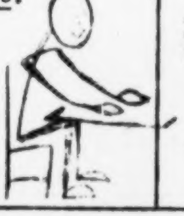
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches conscious inhibition of total flexion due to reflexes. Promotes balance of upper trunk. Prepares for support of trunk with arms during weightbearing.	Pressing on surface (e.g. in writing, coloring). Sitting balance, Standing.	Tim - both hands on knees when pushing down. Linda - hands push knees together. Jeff - push hands on knees until his heels are down.
Teaches inhibition of spastic arm flexion, inward rotation with adduction. Directs extraneous arm movements to a target as child crosses midline of body. Promotes eye-hand coordination.	Eating. Handwashing. Transfer of objects from one hand to another. Writing. Dressing.	LuAnn, Jeff - for each count swing left arm in circular movement over head and then target on the right hand which is on their right knee. Tim - left hand on left knee, other hand grasps rung of L.B.
Teaches inhibition of spastic arm flexion with adduction. Directs movement away from midline of body. Promotes balance of upper trunk as one hand is lifted for function.	Eating. Handwashing. Transfer of object from one hand to another. Writing. Dressing.	
Teaches inhibition of spastic arm flexion, inward rotation with adduction. Directs extraneous arm movement to a target as child crosses midline of body. Promotes eye-hand coordination.	Eating. Handwashing. Transfer of object from one hand to another. Writing. Dressing.	LuAnn, Jeff - for each count swing right arm in circular movement over head and then target on the left hand which is on their left knee. Tim - right hand on right knee, other hand grasps rung of L.B.
Teaches inhibition of spastic arm flexion with adduction. Directs movement away from midline of body Promotes balance of upper trunk as one hand is lifted for function.	Eating. Handwashing. Transfer of object from one hand to another. Writing. Dressing.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
11. I cross. 1-5 	"Lift your left foot up and cross it over your right at the ankle." "Keep your right foot flat." "Arms straight on the table."	Lift and adduct flexed left leg and place left ankle in front of right ankle.
12. Apart. 	"Push down on your right foot when you lift your left foot." "Arms straight on the table."	Lift and abduct left leg, replace plantar surface on floor as in 2.
13. I cross. 1-5 AS IN 11	"Push down on your right foot when you lift ypur left foot." "Arms straight on the table."	Lift and adduct flexed right leg and place right ankle in front of left ankle.
14. Apart. AS IN 12	"Push down on your right foot when you lift your left foot." "Arms straight on the table."	Lift and adduct right leg with knee flexed and replace plantar surface on floor as in 2.
15. My feet are flat. 1-5 	"Keep your feet together (or apart.)" "Heels down." "Are your feet close to your chair?"	Flex hip, knee and ankle to place plantar surfaces of both feet on floor.

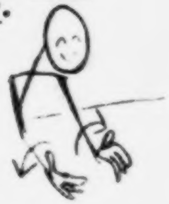
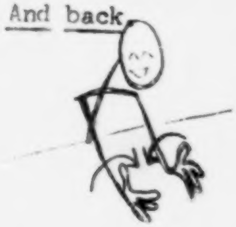
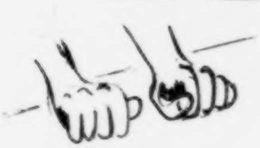
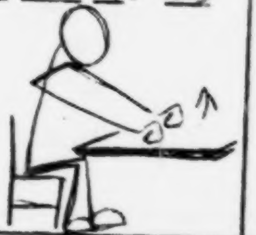
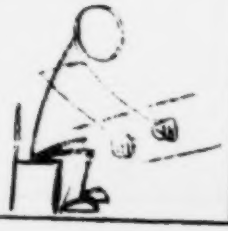
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches alternate weighting of legs. Prepares for stepping.	Stepping. Sitting.	Mel, Tim - feet remain flat and in front of their chair.
Teaches alternate weighting of legs. Prepares for stepping.	Stepping. Sitting.	Tim - pulls knees apart while grasping rung of L.B. placed at his sides.
Teaches alternate weighting of legs. Prepares for stepping.	Stepping. Sitting.	Mel, Tim - feet remain flat and in front of their chair.
Teaches alternate weighting of legs. Prepares for stepping.	Stepping. Sitting.	Tim - pulls knees apart while grasping rung of L.B. placed at his sides.
Teaches conscious modification of flexor withdrawal, stepping reflex, extensor thrust. Prepares for weight bearing on legs. Promotes stable lower trunk for sitting.	Functional free sitting, preparing to stand or transfer to other furniture for sitting.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
16. I push down hard, 1-2-3-4-5. 	"Keep your right foot flat." "Lift your left leg up and step down with your whole foot on each count."	Firmly press entire plantar surface of left foot to floor rythmically on each count (5 times).
17. I push down hard, 1-2-3-4-5-. AS IN 16	"Keep your left foot flat." "Lift your right leg up and step down hard on each count." "Keep your heels down."	Firmly press entire plantar surface of right to floor rythmically on each count (5 times).
18. My hands are open. 1-5 	"Elbows straight." "Stretch your fingers." "Thumbs out."	Extend fingers and abduct thumbs to place palmar surfaces of both hands on table or knees.
19. I touch. 1-5 	"Keep your hands open." "Bend both elbows at once." "Keep your head in the middle, and rest your chin in your hands."	Symmetrically flex elbows and place both open hands on cheeks to allow heels of hands to support chin while elbows remain fixed.
20. And down. 	"Look at your hands." "Straighten both elbows at once." "Keep hands open." (Reminder as needed, flat feet.)	Symmetrically extend elbows and replace hands flat as in 18.

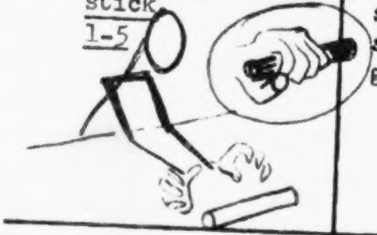
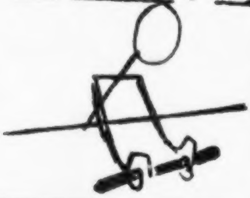
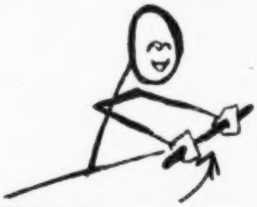
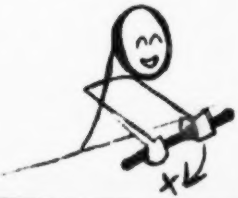
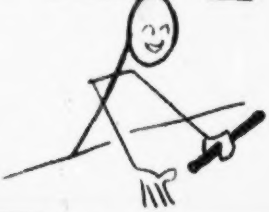
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Rhythmical flexion and extension with pressure on plantar surface teaches inhibition of stepping reflex, extensor thrust, and promotes dorsiflexion of foot while extensor muscles are working. Prepares for stepping and walking.	Stepping. Sitting.	Tim - slides feet back to chair. Pushes down on left knee with left hand.
Rhythmical flexion and extension with pressure on plantar surface teaches inhibition of stepping reflex, extensor thrust and promotes dorsiflexion of foot while extensor musles are working. Prepares for stepping and walking.	Stepping. Sitting.	Tim - Pushes down on right knee with right hand.
Teaches voluntary inhibition of spastic hand flexion with adducted thumb, Prepares for grasp and thumb abduction. Reminds child to re-establish position, or maintain it for longer time.	Grasp and release in general.	Tim - both hands opened over knees.
Promotes symmetrical arm movement at midline of body, weight bearing on elbows. Promotes finger extension when wrist is also in extension.	Bringing cup to mouth in drinking. Hair washing. Face washing.	
Promotes symmetrical elbow extension and shoulder girdle protraction. Teaches conscious inhibition of ATNR and STNR patterns.	Drinking. Bathing. Hair washing. Dressing.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
21. To my shoulder. 1-5 	"Head in middle, keep your right arm straight and your hands open." "Slide your left hand up your right arm." "I should see straight fingers over your shoulder."	Flex left elbow and place partially extended fingers of hand on right shoulder while right elbow remains extended.
22. And down. 	"Keep right arm straight." "Put your left hand down on the table, straighten your elbow."	Extend left elbow and replace open left hand on table as in 18.
23. To my shoulder. 1-5 	"Head in middle, keep your left arm straight and your hands open." "Slide your right hand up your left arm." "I should see straight fingers over your shoulder."	Flex right elbow and place partially extended fingers of right hand on left shoulder while left elbow remains extended.
24. And down. 	"Head in middle, keep your hand open (or grab towel from shoulder), straighten your elbow."	Extend right elbow and replace open right hand on table as in 18.
25. My elbows are straight. 1-5 	"Stretch both arms." "Be sure your hands are flat." "Are your feet flat, too?"	Symmetrically extend elbows while hands remain open.

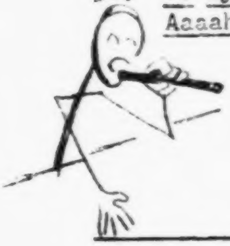
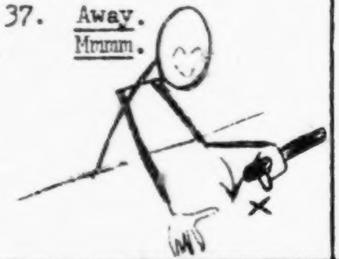
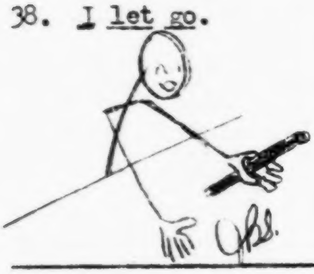
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes asymmetrical arm movement, balance of upper trunk using one hand as support. Teaches conscious inhibition of ATNR as midline of body is crossed.	Eating. Bathing. Dressing. Washing. Grooming.	Tim, Linda, Nancy, Lori, Doreen, Lloyd, Mel - slide hand to elbow without facilitation.
Promotes asymmetrical arm movement, balance of upper trunk using one hand as support. Teaches conscious inhibition of ATNR as midline of body is crossed.	Eating. Bathing. Dressing. Washing. Grooming.	
Promotes asymmetrical arm movement, balance of upper trunk using one hand as support. Teaches conscious inhibition of ATNR as midline of body is crossed.	Eating. Bathing. Dressing. Washing. Grooming.	Tim, Linda, Lori, Doreen, Lloyd, Mel - slide hand up to elbow without facilitation. Nancy - grasps shirt sleeve to maintain position.
Promotes asymmetrical arm movement, balance of upper trunk using one hand as support. Teaches conscious inhibition of ATNR as midline of body is crossed.	Eating. Bathing. Dressing. Washing.	
Teaches conscious inhibition of Moro reflex, ATNR pattern, and spastic flexion, rotation and adduction to body.	Handwashing. Standing.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
26. Hands over, Over. 	"Turn both hands over, thumbs to the outside, palms up." " Keep your fingers straight, elbows straight."	Outwardly rotate forearm while elbows and fingers remain extended and thumb abducted.
27. And back. 	"Keep elbows straight, turn open hands back."	Inwardly rotate forearm, replace palmar surfaces of both hands on table or knees.
28. I make two fists. 1-5 	"Thumbs outside the fist." " Keep elbows straight."	Simultaneously flex fingers of both hands into fists while thumbs remain abducted.
29. I lift up. 1-5 	"Keep elbows straight, lift up with both arms at same time." "Feet flat." "Raise your hands as far as you can while keeping your elbows straight."	Symmetrically retract shoulder girdle to less than 90° angle from table while elbows remain extended, fists maintained.
30. And down. 	"Keep elbows straight." "Put both arms down at same time."	Protract shoulder girdle to replace fists on table.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes symmetrical outward rotation of hands and arm with fingers extended. Teaches inhibition of Moro reflex, ATNR.	Handwashing. Standing.	Tim - one hand turned over on knee. During second counting he should grasp rung of L.B. with hand that was on knee and place his other hand over on knee (palms up).
Teaches symmetrical inward rotation of forearms with elbows extended. Breaks up arm and hand flexion and shoulder girdle retraction pattern. Promotes asymmetrical arm rotation. Teaches inhibition of Moro, ATNR, STNR.	Handwashing. Standing.	
Promotes grasp with elbows extended. Prepares for grasping an object to support and balance upper trunk.	Standing. Grasp and release in general.	Tim - grasps rungs of two L.B. which are placed at his side.
Promotes balance of trunk as controlled arm extension and shoulder retraction occurs. Teaches inhibition of Moro reflex.	Drinking.	Tim - grasps higher on the rungs of the L.B.
Promotes eye-hand coordination in re-establishing support of upper trunk. Promotes maintenance of arm extension.	Drinking.	Tim - returns to original position on rungs of L.B.

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
31. I grab my stick. 1-5 	"Open your hands and grab the stick with both hands." "Thumbs should be under the stick." "Keep grabbing as long as you can."	Symmetrically extend fingers and outwardly rotate thumbs of both hands and then flex fingers around stick with thumb in opposition.
32. My elbows are straight. 1-5 	"Stretch both elbows." "Keep your wrists down." "Push the stick away."	Symmetrically extend elbows while maintaining grasp of stick.
33. Lift up. 1-5 	"Keep elbows straight." "Keep feet flat." "Grab with both hands."	Lift stick from table or knees while both elbows remain extended, partially retract shoulder girdle.
34. And down. 	"Keep elbows straight." "Keep grabbing with both hands."	Return stick to table. Protract shoulder girdle.
35. I let go. 1-5 	"Let go with one hand." "Put your free hand flat on the table in front of you."	Extend fingers and outwardly rotate thumb of one hand to release stick while grasp is maintained with preferred hand.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes eye-hand coordination. Teaches maintenance of grasp with extended elbows.	Standing. Sitting.	Tim - grasps stick first with right hand, places stick on knee and grasps with the other hand.
Teaches concept of pushing weightbearing on arms. Prepares for support of upper trunk in standing. Promotes maintenance of elbow extension. Re-establishes functional position. Reinforces maintenance.	Standing.	
Promotes maintaining grasp of object while raising and lowering shoulder girdle. Teaches inhibition of Moro reflex, STNR.	Standing. Handwashing. Dressing.	Tim - grasped stick remains on knees. Lloyd, Doreen, Lori, Nancy, Mel - raise stick 3" to place on supportive surface.
Promotes maintaining grasp of object while raising and lowering shoulder girdle. Teaches inhibition of Moro reflex, STNR.	Standing. Handwashing. Dressing.	
Promotes keeping head in midline and balance of upper trunk as one hand moves to re-establish support. Teaches inhibition of ATNR, and Moro reflex.	Eating. Writing.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
36. To my mouth, Aaaah. 	"Keep grabbing stick with one hand."" Bring the stick to your mouth, like taking a bite of something."	Flex elbow and inwardly rotate forearm holding stick and bring stick to mouth while keeping other elbow extended.
37. Away. Mmmm. 	"Keep grabbing, put the stick back on the table." "Do it again." (Repeat movement several times.)	Extend elbow, maintain grasp with preferred hand while placing stick on table.
38. I let go. 	"Keep one arm straight, hand flat." "Give me the stick when I come to you."	Extend fingers and outwardly rotate thumb of hand holding stick to release stick in designated place.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes asymmetrical arm flexion and extension while keeping head in midline - eye-hand coordination. Teaches conscious inhibition of ATNR.	Eating. Writing.	
Promotes asymmetrical arm flexion and extension while keeping head in midline - eye-hand coordination. Teaches conscious inhibition of ATNR.	Eating. Writing.	
Promotes keeping head in midline and balance of upper body as one hand moves to re-establish support. Teaches inhibition of ATNR and Moro reflex.	Eating. Writing.	

Hand Class (H3 - Group I)

A number of specific goals were emphasized in this hand class. Basically, it was designed to teach the functional movements involved in standing, stepping and walking as well as those which promote stabilized free-sitting. Range-of-motion activities which are stressed include use of upper trunk, and extended arms while maintaining a stable lower trunk and movements involving hip, knee and ankle rotation and flexion, while maintaining a stable upper trunk. A major goal emphasized throughout the series is proper weightbearing which teaches the support needed for standing and walking. Finer finger movements and certain arm and wrist positions included are also involved in teaching weightbearing. Continuous rhythmical motion needed for breathing, counting and singing is emphasized throughout, as is the rhythm necessary for the simultaneous, reciprocal movements required for walking.

The children are seated in a circle in the following manner:

LuAnn - on a box.
Jeff - on a box.
Ted - on his chair.

After coming to a stand, both Ted and Jeff grab two chairs at their sides for support.

Room Copy

HAND CLASS March 7, 1972

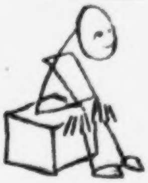
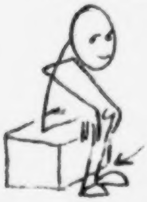
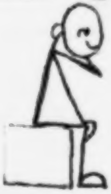
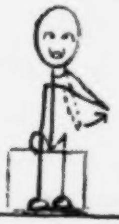
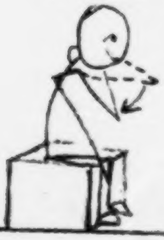
Arrangement - Jeff on box, Ted on chair, LuAnn on box. All in semi-circle. LuAnn gets sticks out and gives them to Jeff before class. She brings her box to class.

1.	I stretch my fingers.	1-5.	Hands over knees. Care to Ted's wrists (extend-point up).
2.	My feet are flat.	1-5.	Stress weight over feet.
3.	Left hand to my neck.	1.	Do with some swing. Other hand remains on knee.
4.	Elbow back.	2.	
5.	Forward.	3.	Tell them to point elbows to leader.
6.	And down.		
7-10.	Same with right hand Jeff passes sticks. Use sticks for the movement before doing with hands.		After intending words the movement should be done to numbers, then to song.
11.	Hands to my neck.	1.	They grab a stick with both hands and they go up to the neck. After repeating movement to counting only, they do it without sticks. Hands to neck. Attention to wrists.
12.	Elbows back.	2.	
13.	Forward.	3.	
14.	Elbows back.	4.	
15.	And down.	5.	
	Song - "La-la"		
16.	Breathing exercise (0) (0) (0), 3 times while going down.		Start with exhalation. End with inhalation. Different vowels may be substituted. Attention to mouth position. Vocalization done while on exhaling. They hang arm between knees And head goes down - on inhalation arms go out to the sides, attention to lip closure.
17.	Prolong vowel (0)		
18.	I point up. Up.		Fingers point up. Wrists remain on knees.
19.	And down.		

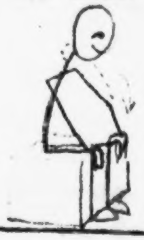
20. I point up. Up. 21. And down.	Toes point up, heels remain on floor. Feet should be in front of chair before beginning movement.
22. I point up. Up. 23. And down.	Simultaneously toes and fingers point up.
24. I push down hard. 1-5.	Left foot. Stress proper foot position and heels down.
25. I step out. 1-2-3-4-5.	Other foot remains in position. Toes straight ahead.
26. And back. 1-2-3-4-5.	On 5, feet should be together.
27- 29. Repeat with right foot.	
30- 32. With both feet.	
31. I step out. 1-2-3-4-5. with both feet.	Simultaneously step out.
32. And back. 1-2-3-4-5.	
33. To my knee. 1-5.	Left foot.
34. Bend left foot up and down. repeat.	LuAnn, reminded to be exact. Heel should be on knee.
35. And back.(to floor)	Hands do not assist lifting and dorsiflexion. Jeff & Ted both hands may assist lifting and dorsiflexion. Reminding Ted to push knee out (after up there) facilitates keeping heel on knee. Jeff should not be falling forward. Weight should be on other foot.
36- 38. Same with right foot.	
39. Arms to side. 1. to the chest 2. to the side 3. Clap above heads.4.	Encourage fingers and elbows straight. Feet flat on the floor, clap above head. Ted attention to wrist and foot position.
40. And down. 5.	Jeff attention to clapping above head.
Children hold hands in circle and sing "I have a friend."	

41. We make a basket. 1-5.	All interdigitate fingers.
42. I lift up. 1-2-3-4-5.	Elbows straight - feet remain on floor.
43. And down. 5-4-3-2-1.	
44. Hands on knees in a basket 1 out 2 basket 3 out 4 basket 5 above head 5 above head out 4 basket 3 out 2 basket 1	Fingers interdigitated, elbows straight. Palms forward. Slowly raise arms above head. Slowly 90° downwards. After, do movement only with counting, and then to a song.
45. I stand up. 1-5.	Clasp hands in front.
46. I stand tall. 1-5.	Jeff - stands in braces holding two chairs.
47. I lift up, up, left, then right hand.	Ted - clasps hands and swings down to stand.
48. And down.	Remind to keep feet together. Elbows straight. "Helmet" like facilitation. After standing grabs 2 chairs. LuAnn - helmet on. If some equipment is needed for support, they should release grasp on it. Increase time without support. Walk to tables for juice. Attention to foot position. Jeff - braces on between 2 chairs. Ted - 2 chairs. LuAnn - free walking. Each bring something needed for pre-supper activity.

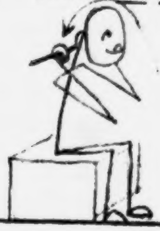
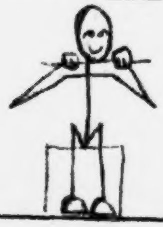
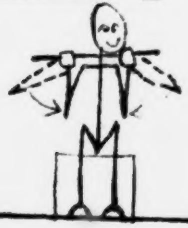
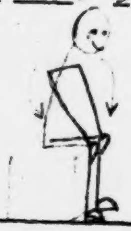
DOCUMENTATION CHART (H3-Group 1)

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
1. I stretch my fingers. 1-5. 	"Put your palms flat on your knees and get your fingers apart and as straight as you can." "Keep your wrists down."	Extend fingers and abduct thumbs to place palmar surface of both hands on knees. Maintain dorsiflexed wrists.
My feet are flat. 1-5. 	"Bend your hips and lean forward over your feet." "Keep your head in the middle." "Make sure your feet are flat and toes point straight ahead."	Flex hip, knee and ankle to place plantar surface of both feet on floor. Rotate knees so feet are parallel.
2. Left hand to my neck. 1. 	"Swing your left hand up to your neck." "Keep your hand open." "Keep your right hand flat on your right knee."	Extend right elbow to maintain upper trunk. Asymmetrically flex elbow and place extended fingers on left side of the neck.
Elbow back. 2. 	"Keep your open hand on your neck and point your elbow back until it is even with your shoulder."	Extend fingers and dorsiflex wrist. Flex left elbow and abduct elbow.
Forward. 3. 	"Point your elbow straight ahead again."	Extend fingers and dorsiflex wrist. Flex left elbow and adduct shoulder.

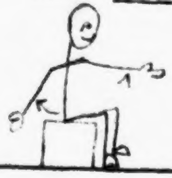
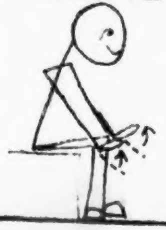
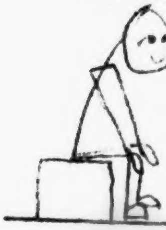
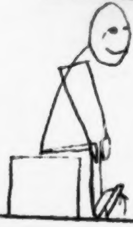
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches voluntary inhibition of spastic hand flexion with adducted thumb. Prepares for grasp and release. Aids in achieving and maintaining a good sitting balance by fixing some parts of the body to other parts.	Voluntary grasp and release. Stabilizing an object or body part on a surface.	
Teaches conscious inhibition of flexor withdrawal, stepping reflex, extensor thrust and prepares for weight-bearing on legs. Promotes stable lower trunk for sitting.	Functional free sitting. Preparation to stand or transfer to other furniture for sitting.	
Teaches fixation and stabilization of trunk while moving another part of the body. Promotes asymmetrical arm movement. Prepares for stable sitting while engaging in range of motion activity.	Eating. Bathing. Dressing. Washing. Grooming. Sitting.	
Promotes dorsiflexion of wrists and asymmetrical elbow flexion, outward rotation of shoulder, and extension of fingers.	Eating. Bathing. Dressing. Washing. Grooming. Sitting.	
Promotes dorsiflexion of wrists and asymmetrical elbow flexion, inward rotation of shoulder, and extension of finger.	Eating. Dressing. Bathing. Washing. Grooming. Sitting.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
And down. 	"Put your left hand down on your knee." "Straighten your elbow." "Keep your hands flat."	Extend left elbow and replace palmar surface on left knee.
3. Right hand to my neck. 1. as in 2	"Swing your right hand up to your neck." "Keep your hand open." "Keep your left hand flat on your left knee."	Extend left elbow to maintain upper trunk. Asymmetrically flex elbow and place extended fingers on right side of the neck.
Elbow back. 2. as in 2	"Keep your open hand on your neck and point your elbow back until it is even with your shoulder."	Extend fingers and dorsiflex wrist. Flex right elbow and abduct elbow.
Forward. 3. as in 2	"Point your elbow straight ahead again."	Extend fingers and dorsiflex wrist. Flex right elbow and adduct shoulder.
And down. as in 2	"Put your right hand down on your knee." "Straighten your elbow." "Keep your hands flat."	Extend right elbow and replace palmar surface on right knee.

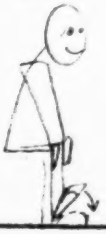
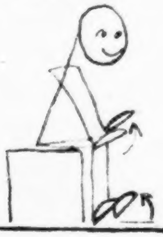
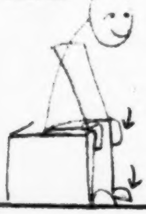
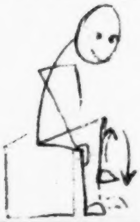
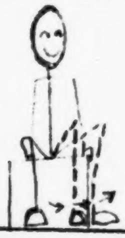
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes asymmetrical arm movement, balance of upper trunk using one hand as support. Teaches conscious inhibition of ATNR.	Eating. Bathing. Dressing. Washing. Grooming. Sitting.	After entire movement (#2) has been done using intentions, all children perform movement to rhythm of a song.
Teaches fixation and stabilization of trunk while moving another part of the body. Promotes asymmetrical arm movement. Prepares for stable sitting while engaging in range of motion activity.	Eating. Bathing. Dressing. Washing. Grooming. Sitting.	
Promotes dorsiflexion of wrists and asymmetrical elbow flexion, outward rotation of shoulder, and extension of fingers.	Eating. Bathing. Dressing. Washing. Grooming. Sitting.	
Promotes dorsiflexion of wrists and asymmetrical elbow flexion, inward rotation of shoulder, and extension of fingers.	Eating. Bathing. Dressing. Washing. Grooming. Sitting.	
Promotes asymmetrical arm movement, balance of upper trunk using one hand as support. Teaches conscious inhibition of ATNR.	Eating. Bathing. Dressing. Washing. Grooming. Sitting.	After entire movement (#3) has been done using intentions, all children perform movement to rhythm of a song.

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
4. Hands to my neck. 1. 	"Grab the stick with both hands." "Bring your stick to the back of your neck." "Keep your head in the middle and feet flat on the floor."	Extend fingers and abduct thumb, then flex fingers with thumb in opposition to grasp. Flex and lift arms to place on back of neck.
Elbows back. 2. 	"Point both elbows back as far as you can." "Keep grabbing the stick."	Maintain grasp and symmetrically flex and abduct elbows.
Forward. 3. 	"Point both your elbows straight ahead again." "Try to touch your elbows together."	Maintain grasp and symmetrically flex and adduct elbows.
Elbows back. 4. as in 2 above	"Point both elbows back as far as you can." "Keep grabbing the stick."	Maintain grasp and symmetrically flex and abduct elbows.
And down. 5. 	"Look at your hands." "Straighten both elbows and put your hands back on your knees." "Set your sticks down next to your chair."	Symmetrically extend both elbows. Extend fingers to release grasp and place palmar surfaces on knees.

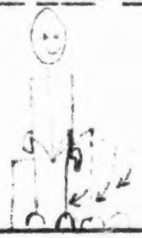
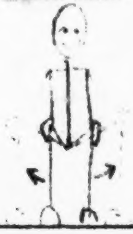
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes symmetrical arm flexion and grasp. Teaches dorsiflexion of the wrists. Teaches conscious inhibition of ATNR and STNR. Promotes weightbearing on legs.	Drinking. Bathing. Dressing. Face and hair washing. Sitting. Grasp of an object.	Jeff - places stick on top of head. His goal is to stretch closer to the back of his neck each time.
Promotes symmetrical wrist and elbow flexion and shoulder abduction. Teaches conscious inhibition of ATNR.	Drinking. Bathing. Dressing. Face and hair washing. Sitting. Grasp of an object.	
Promotes symmetrical wrist and elbow flexion and shoulder adduction. Promotes weightbearing on legs.	Drinking. Bathing. Dressing. Face and hair washing. Sitting. Grasp of an object.	
Promotes symmetrical wrist and elbow flexion and shoulder abduction. Teaches conscious inhibition of ATNR.	Drinking. Bathing. Dressing. Face and hair washing. Sitting. Grasp of an object.	
Promotes symmetrical elbow extension and shoulder protraction. Teaches conscious inhibition of the ATNR and STNR patterns. Teaches grasp and release.	Drinking. Bathing. Dressing. Face and hair washing. Release of an object. Sitting.	After entire movement (#4) has been done using a stick to teach position, all the children perform the movements with their hands to rhythm of a song.

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
5. (Breathing exercise repeated several times) Head down, arms between knees and exhale 0-0-0.	"Breathe out saying 0-0-0 with rounded lips. At the same time bring both arms down between your knees and bow head."	Exhale and vocalize simultaneously with symmetrical adduction of shoulders. Bring arms together in the midline between the knees. Flex head and hips.
Head up, arms out to sides and inhale hhm. 	"Breathe in h-h-m and at the same time bring both arms up and out to the sides and head up." "Lips together."	Inhale simultaneously with the extension of the upper trunk and extension and abduction of arms to the sides at right angles.
6. I point up. Up. Up. 	"Rest the heels of your hands on your knees." "Bend both wrists back and point fingers up to the ceiling."	Extend fingers and elbows. Symmetrically dorsiflex wrists.
And down. 	"Bring hands down flat on your knees again."	Symmetrically extend both wrists placing palmar surfaces on knees.
I point up. Up. Up. 	"Make sure your feet are flat on the floor in front of your chair and pointing straight ahead." "Keep your heels down and point all your toes up."	Maintain heels on floor and symmetrically dorsiflex ankles maximally.

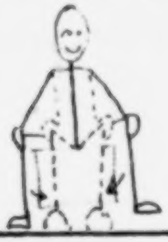
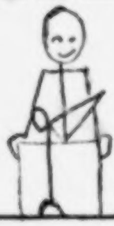
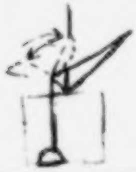
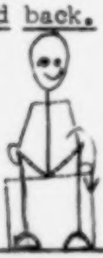
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes flexion of upper trunk and weightbearing on legs. Teaches rhythmical breathing, vocalization and speech. Promotes symmetrical adduction of arms to the midline.	Breath control. Speech. Dressing. Standing up. Sitting balance.	
Promotes extension of upper trunk, weightbearing on legs and symmetrical abduction and extension of arms. Teaches lip closure and breath control.	Breath control. Speech. Dressing. Standing up. Sitting balance.	
Promotes symmetrical flexion of wrists and simultaneous extension and separation of fingers. Teaches voluntary inhibition of spastic hand flexion. Promotes eye-hand coordination. Prepares for controlled grasp and release.	Drinking. Dressing. Face and hair washing.	
Promotes symmetrical extension of both wrists and fingers. Teaches voluntary inhibition of spastic hand flexion. Prepares for controlled grasp and release of objects.	Drinking. Dressing. Face and hair washing.	
Promotes symmetrical flexion of feet. Prepares for stepping and walking.	Walking.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
And down. 	"Put your feet flat again with toes and heels down."	Place plantar surface of both feet on floor.
I point up. Up. Up. 	"Point fingers and toes up together." "Keep hands on your knees and heels on the floor."	Simultaneously and symmetrically dorsiflex feet and wrists pointing digits upwards. Heels of hands and feet remain fixed.
And down. 	"Put your feet and hands flat again."	Simultaneously and symmetrically extend wrists and feet to place palmar and plantar surfaces flat.
7. I push down hard. 1-5. 	"Keep your right foot flat." "Lift your left leg up and step down hard with your whole foot on each count."	Rhythmically lift and then place plantar surface of foot on the floor.
I step out. 1-2-3-4-5 	"Keep your right foot flat." "Lift your left leg and step out and down on each count."	Rhythmically lift and outwardly rotate knee and hip, then place plantar surface on floor. On each count increase angle of rotation.

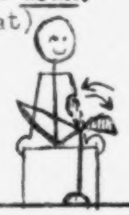
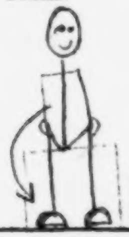
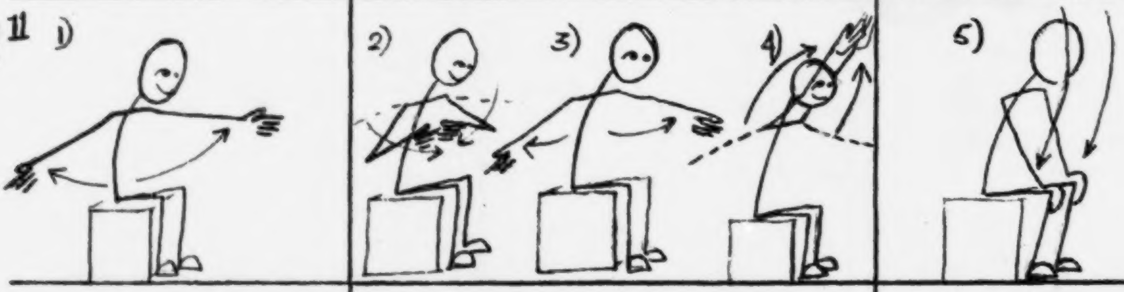
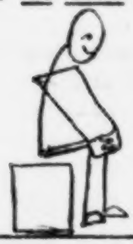
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches conscious inhibition of flexor withdrawal, stepping reflex, extensor thrust and prepares for weight-bearing on legs. Promotes stable lower trunk for sitting.	Standing. Walking.	
Promotes symmetrical and simultaneous dorsiflexion of feet and wrists. Promotes eye-hand coordination and hand-foot coordination.	Drinking. Dressing. Face and hair washing. Walking.	
Promotes symmetrical extension of wrists and fingers. Teaches conscious inhibition of flexor withdrawal and extensor thrust. Prepares for weightbearing on arms, hands and legs.	Sitting. Dressing. Drinking. Face washing.	
Teaches conscious inhibition of extensor thrust and flexor withdrawal. Promotes dorsiflexion and weightbearing on legs.	Walking. Sitting.	
Teaches conscious inhibition of extensor thrust and flexor withdrawal. Promotes dorsiflexion and weightbearing on legs and outward rotation of hips and knees.	Walking. Sitting.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
And back. 1-2-3-4-5 	"Bring hands down flat on your knees again and step down hard and back toward the middle on each count." "On 5 your feet should be together."	Rhythmically lift and inwardly rotate knee and hip and place plantar surface on floor. On each count decrease the angle of rotation.
8. I push down hard. 1-5. as in 7	"Keep your left foot flat." "Lift your right leg up and step down hard with your whole foot on each count."	Rhythmically lift and then place plantar surface of foot on the floor.
I step out. 1-2-3-4-5. as in 7	"Keep your left foot flat." "Lift your right leg and step out and down on each count."	Rhythmically lift and outwardly rotate knee and hip, then place plantar surface on floor. On each count increase angle of rotation.
And back. 1-2-3-4-5. as 7 above	"Bring hands down flat on your knees again and step down hard and back toward the middle on each count." "On 5 your feet should be together."	Rhythmically lift and inwardly rotate knee and hip and place plantar surface on floor. On each count decrease the angle of rotation.
9. I step out. 1-2-3-4-5. 	"Begin with your flat feet together in front of your chair." "On each count step out to the sides with both feet."	Simultaneously and rhythmically outwardly rotate and lift knees to step and place plantar surfaces on floor.

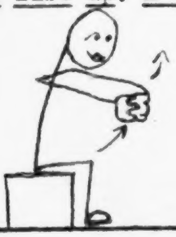
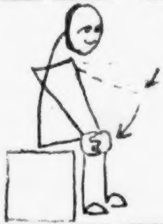
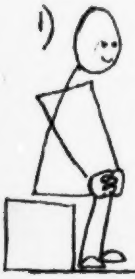
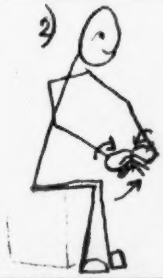
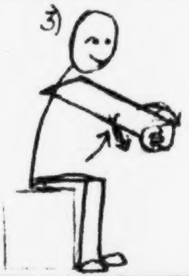
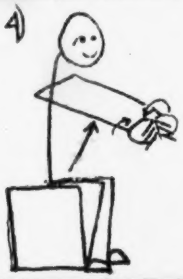
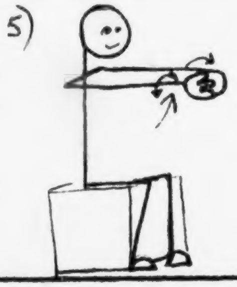
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches conscious inhibition of extensor thrust and flexor withdrawal. Promotes dorsiflexion and weight-bearing on legs. Promotes inward rotation of knees and hips.	Walking. Sitting.	
Teaches conscious inhibition of extensor thrust and flexor withdrawal. Promotes dorsiflexion and weight-bearing on legs.	Walking. Sitting.	
Teaches conscious inhibition of extensor thrust and flexor withdrawal. Promotes dorsiflexion and weightbearing on legs and outward rotation of hips and knees.	Walking. Sitting.	
Teaches conscious inhibition of extensor thrust and flexor withdrawal. Promotes dorsiflexion and weight-bearing on legs. Promotes inward rotation of knees and hips.	Walking. Sitting.	
Teaches conscious inhibition of extensor thrust and flexor withdrawal. Promotes outward rotation of hips and knees. Promotes dorsiflexion and weightbearing on legs.	Walking. Sitting. Standing up.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
And back. 1-2-3-4-5 	"Step down hard on each count with both feet at once and bring your feet back together." By 5 your feet should be together again."	Press plantar surfaces of both feet rhythmically to the floor, simultaneously stepping from sides back to middle. Inwardly rotate hips and knees.
10. To my knee. 1-5. 	"Keep your right foot flat on the floor." "Bring your left foot up and rest the heel on your right knee."	Retract left knee and hip, placing the heel of the left foot on the right knee.
Bend left foot up and down. (repeat) 	"Keep your left heel on your right knee." "Point your toes up and down, up and down."	Maintaining left heel on right knee, dorsiflex and extend left ankle in a continuous movement.
And back. 	"Put your left foot back flat on the floor in front of your chair."	Firmly place plantar surface of left foot on floor. Rotate knees so feet are parallel.
To my knee. 1-5. as in 10 above	"Keep your left foot flat on the floor." "Bring your right foot up and rest the heel on your left knee."	Retract right knee and hip, placing the heel of the right foot on the left knee.

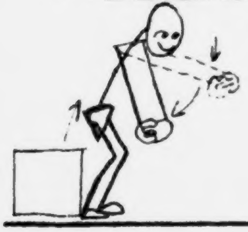
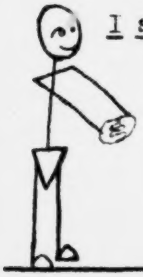
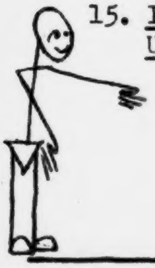
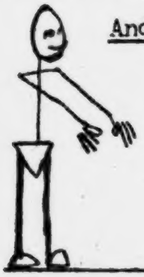
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches conscious inhibition of extensor thrust and flexor withdrawal. Promotes dorsiflexion and weightbearing on legs. Promotes inward rotation of hips and knees.	Walking. Sitting.	
Teaches conscious inhibition of total flexion pattern. Teaches alternate weighting of feet. Promotes maintenance of sitting balance, and outward rotation of hip.	Sitting. Walking. Climbing stairs.	LuAnn may not use her hand to lift and bend her foot. Jeff and Ted may use hands to aid in lifting and bending feet.
Teaches conscious inhibition of total flexion pattern. Teaches alternate weighting of feet. Promotes maintenance of sitting balance, and outward rotation of hips, and ankle flexion extension.	Sitting. Dressing. Stepping.	
Promotes weightbearing on legs and stable sitting. Teaches conscious inhibition of flexor withdrawal and extensor thrust.	Standing. Stepping. Sitting.	
Teaches conscious inhibition of total flexion pattern. Teaches alternate weighting of feet. Promotes maintenance of sitting balance, and outward rotation of hip.	Sitting. Walking. Climbing stairs.	LuAnn may not use her hand to lift and bend her foot. Jeff and Ted may use hands to aid in lifting and bending feet.

INTONATION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
Bend right foot up and down. (repeat) 	"Keep your right heel on your left knee." "Point your toes up and down, up and down."	Maintaining right heel on left knee, dorsiflex and extend right ankle in a continuous movement.
And back. 	"Put your right foot back flat on the floor in front of your chair."	Firmly place plantar surface of right foot on floor. Rotate knees so feet are parallel.
11. Arms to side - 1, to chest - 2, to side - 3, clap 4, and down-5.	"Bring both arms out to the sides, back to your chest, to the sides again, clap hands together above your head and put hands back on knees." "Be sure to keep your feet flat the whole time." "Remember to keep your hands open and elbows straight."	Symmetrically and rhythmically abduct and extend arms, then adduct and flex, abduct and extend, extend and retract shoulders then protract. Extend fingers and bring hands in the midline when shoulders are retracted.
fig 11 		
12. We make a basket. 1-5. 	"Join your hands together in the middle, putting your fingers in-between each other."	Interdigitate fingers in the midline. Extend elbows.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches conscious inhibition of total flexion pattern. Teaches alternate weighting of feet. Promotes maintenance of sitting balance, and outward rotation of hip and ankle flexion-extension.	Sitting. Dressing. Stepping.	
Promotes weightbearing on legs and stable sitting. Teaches conscious inhibition of flexor withdrawal and extensor thrust.	Standing. Stepping. Sitting.	
Promotes symmetrical and rhythmical range of motion while maintaining stable lower trunk. Teaches conscious inhibition of ATNR, Moro, STNR, total flexion and extension patterns. Promotes weightbearing on arms, hands and legs.	Sitting. Dressing. Standing. Walking.	
Promotes weightbearing on legs, weight forward, hands in the midline, and interdigitation of fingers. Teaches conscious inhibition of ATNR and Moro. Promotes eye-hand coordination.	Grasp and release. Manipulation of objects in midline. Dressing. Bathing. Standing. Walking.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
I lift up. 1-2-3-4-5 	"Keep your elbows straight and feet flat." "Lift joined hands a little farther up on each count."	Lift and extend elbows and interdigitated fingers in the midline. Increase the gradation on each count until hands are above head.
And down. 5-4-3-2-1 	"Keep your elbows straight and feet flat." "Lower your joined hands down, a little farther on each count."	Lower elbows maintaining interdigitated fingers in the midline. Slowly decrease the gradation.
13. Basket-1, out-2, basket-3, out-4, basket-5.	"Begin with your elbows straight, feet flat and joined hands on your knees." "Turn your joined hands inside out on 2, back together on 3, out on 4, and together on 5." "Slowly raise your hands up with each number."	Alternate extension and flexion of elbows and inward and outward rotation of wrists. Simultaneously lift hands up in the midline.
 1)  2)	 3)  4)	 5)
Basket-5, out-4, basket-3, out-2, basket-1. Reverse fig. 13.	"Turn joined hands in and out; gradually lower them to your knees by 5."	Alternate extension and flexion of elbows and inward and outward rotation of wrists. Simultaneously lower hands back to knees.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes weightbearing on legs, interdigitated hands in midline and eye-hand coordination. Prepares for maintenance of any position and thrusting weight forward. Teaches conscious inhibition of ATNR and Moro.	Grasp and release. Manipulation of objects in midline. Dressing. Bathing. Standing. Walking.	
Promotes weightbearing on legs, interdigitated hands in midline and eye-hand coordination. Prepares for maintenance of any position and thrusting weight forward. Teaches conscious inhibition of ATNR and Moro.	Grasp and release. Manipulation of objects in midline. Dressing. Bathing. Standing. Walking.	
Promotes continuous flexion and extension of elbows and wrists. Prepares for weight-bearing and thrusting weight forward. Teaches conscious inhibition of ATNR, Moro reflex and extensor thrust.	Grasp and release. Manipulation of objects in midline. Dressing. Bathing. Standing. Walking.	
Promotes continuous flexion and extension of elbows and wrists. Prepares for weightbearing and thrusting weight forward. Teaches conscious inhibition of ATNR, Moro reflexes and extensor thrust. Teaches lowering of hands in midline	Grasp and release. Manipulation of objects in midline. Dressing. Bathing. Standing. Walking.	After #13 has been done using intentions, all perform movement to counting and then to singing.

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
14. I stand up. 1-5. 	"Pull your feet in by your chair and lean forward." "Keep your hands together and stand up."	Extend arms to midline with fingers interdigitated. Extend knees to propel body upwards, with ankles dorsiflexed.
I stand tall. 1-5. 	"Get your elbows straight,head up in the middle and back up straight." "Put weight on both feet."	Extend elbows and knees maximally to support trunk.
15. I lift up. Up. Up. 	"Keep your elbow straight and lift your left arm up as high as you can." "Look at your hand."	Maximally extend and retract left arm above the head. The right hand and legs support trunk.
And down. 	"Put your arm down." "You can grab the chair to help you stand tall."	Extend left arm down. Both hands and legs support trunk.
16. I lift up. Up. And down. as in 15	"Keep your elbow straight and lift your right arm up as high as you can." "Look at your hand." "Put your arm down." "You can grab the chair to help you stand tall."	Maximally extend and retract right arm above the head. The left hand and legs support trunk. Extend left arm down. Both hands and legs support trunk.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes weight forward, weightbearing on legs, and balance. Teaches conscious inhibition of ATNR and labyrinthine reflex.	Standing up. Standing. Walking. Sitting.	Ted - Swings clasped hands downward to get momentum to stand up. Jeff and Ted - Grab chairs at sides after coming to a stand.
Promotes weightbearing on hands, arms and legs, and ankle dorsiflexion.	Standing up. Standing. Walking. Sitting.	
Promotes weightbearing, ankle dorsiflexion, eye-hand coordination, perceptual training, and range of motion. Prepares for independent standing.	Standing. Walking. Righting of self.	
Promotes balance, righting self, hand-foot coordination and weightbearing on arms and legs. Teaches conscious inhibition of ATNR, STNR, and Moro.	Standing. Walking. Righting of self.	
Promotes weightbearing, ankle dorsiflexion, eye-hand coordination, perceptual training, and range of motion. Prepares for independent standing. Promotes balance, righting self, hand-foot coordination and weightbearing on arms and legs	Standing. Walking. Righting of self.	

Hand Class (H3 - Group II)

Goals for the following hand class center around the controlled use of hands, arms and upper trunk while maintaining a stable sitting position.

The major emphases for this specific series are those functional movements involved in drinking, eating, grooming and bib donning, with a special section containing range-of-motion activities for the upper trunk. Both symmetrical and asymmetrical hand-to-mouth,neck, or head movements are stressed. Bilateral forearm and wrist rotation for grasp of a double-handled cup is included as well as lifting of one or both arm(s) while maintaining grasp on a stick. In addition to sticks, actual objects such as bibs and cups containing liquid are used for the grasp and release and lifting.

The above movements are all practiced in a good sitting position with added table support. Properly flexed hips, knees and ankles and the weighting of both hips and both feet are stressed throughout.

All the children are seated in non-adaptive chairs, at tables which have been adjusted to proper heights in order to ensure stable sitting during hand work. They are arranged in the following manner:

Nancy - sits on a box at a low table which has the cover off.

Lori - sits in a non-adapted chair without a belt or side supports, at a low table which has the cover off.

Melody- sits in a non-adapted chair at a higher table which has the cover off and is stabilized at the corners with sandbags.

In the case of the above children, the wooden covers are removed from the tables to allow them to maintain or regain a good sitting position by grabbing the slats of the plinths (or uncovered tables). The remaining children are seated at covered tables which better reinforce flat hands with extended fingers. Any additional modifications are contained in the documentation chart which follows.

HAND CLASS (H3)

Group 2

Sitting arrangement:

Mel - chair without sand bag at medium table with low blocks and top off. Shoes on.
Doreen - regular chair at medium table with top off.
Lloyd - regular chair at medium table with top off.
Nancy - on box at small table with top off.
Lori - at small table with top off, in chair without strap, pads on floor.
Tim - on ladderback at medium table with top on - low blocks on table.
Linda - at medium table with top on.

Mel

Lloyd Doreen Lori Nancy

Linda Tim

1.	My feet are flat. 1-5	Remind Mel (and all children) to sit well first, then work at hand tasks. Heels down, toes straight ahead, and feet and legs in front of chair.
2.	My hands are flat. 1-5	Palms open, some can grab plinth slats. Linda keeps hands flat on the table, but keeps elbows off the table and sits tall.
3.	I stretch my fingers. Stretch - stretch - stretch	Fingers apart, try to keep hands on table.
4.	Left hand up, up, up, up.	Maintain both feet flat, right hand on the table, and head in the middle.
5.	And down.	Both hands flat on table.
6.	Right hand up, up, up, up.	Maintain both feet flat, left hand on the table and head in the middle.
7.	And down.	Both hands flat on table.
8.	Both hands up, up, up, up.	Raise both hands and arms up only as far as possible without interfering with good stable sitting.
9.	And down.	Both hands flat.

	Rhythm with hands and arms.	
	Up in the air. Out to the sides.	Feet flat and weight both hips and both feet, heads in the middle.
	And down in front.	Done with poem or song.
10.	Left hand to my left ear. 1-5	Some touch ears or touch head as near to ears as possible, and some grab. Try to keep heads in middle.
11.	And down.	No counting. Flat hands. Straight elbows.
12.	Right hand to my right ear. 1-5	
13.	And down.	
14.	Both hands to both ears. 1-5	Lean forward and rest elbows on table. Bend elbows. Heads in middle. Linda - keep elbows in. Linda and Tim - sit up tall, heads up while doing this.
15.	And down.	
	Flippy Floppy Song	
16.	I grab the stick.	Grab with both hands, one at a time, preferred hand first.
17.	I push the stick away. 1-5	Get elbows straight. Linda - get elbows in.
18.	To me. 1-5	Pull sticks to stomachs. Try to keep them on the table. Lori, Doreen and Lloyd flex or pull arms back as far as they can without losing sitting balance.
19.	Away. 1-5	Straight elbows.

20.	I let go. 1-5	With non-preferred hand. Maintain grasp with opposite hand.
21.	To my mouth. Ah-ah-ah-mmm. (away)	With preferred hand. Keep non-preferred hand flat on table.
22.	I let go. 1-5	Children can put their sticks in the box.
	(POEM)	
23.	My hands are flat. 1-5	Maintain a good neutral position, Feet and hands flat, and heads up in the middle.
	Clasp hands together. 1-5.	Make a basket. Tim, Linda, Melody interdigitate (direct them to put fingers in between)
	Hands to my neck. 1-5	Hands to neck (or chin)
	Elbows apart - together (twice) and flat	Heads in middle.
24.	I make two fists. 1-5	Elbows straight, thumbs out.
25.	I point up. 1-5	Rotate wrists to sides, point thumbs up.
26.	And flat. 1-5	
27.	I grab the cup. 1-5	Both hands grab. Thumbs outside of the fist. Facilitator can help Melody, Lloyd and Lori initiate grasp, then go to Doreen and Nancy and help initiate and maintain grasp. Linda grabs a glass with both hands with palm and fingers spread around the glass. Work for some wrist rotation and straighter elbows.
28.	To my mouth. 1-5	Grasp cup while bringing cup to mouth. Help Doreen to flex hips and get weight forward while bringing cup to mouth.

29. And down.	
30. I let go. 1-5.	Watch cup so it will not tip over. For letting go, facilitator can help by stabilizing the top of cup with 1 or 2 fingers but do not facilitate the release.
31. I grab my bib. 1-5	
32. Open.	Shake bibs open.
33. To my neck. 1-5	Linda and Tim meet ties behind neck - encourage crossing ties over.

Songs & Poems

I Wonder

I wonder, I wonder what I could see,
If I held my head so high,
and looked at T.V.;

I wonder, I wonder, what I will think,
of grabbing my cup and learning to drink;

I wonder, I wonder, if someday soon,
I will feed myself,
holding my spoon;

I wonder, I wonder what I would do,
If I could do anything I wanted to do.

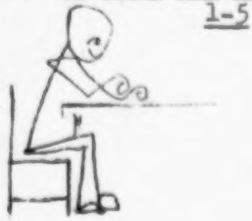
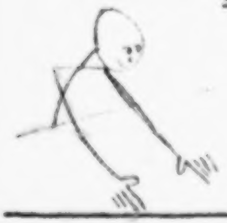
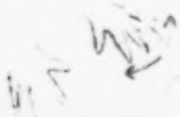
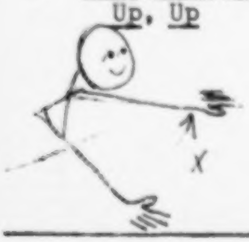
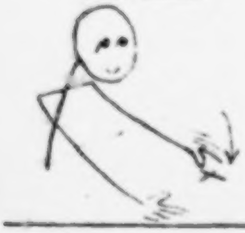
Flippy Floppy Song

I am a little rabbit
with two big long ears,
that go flippy, floppy, flippy, floppy;
And I hear all the gossip
and hear all the news,
with my flippy, floppy, flippy, floppy ears.

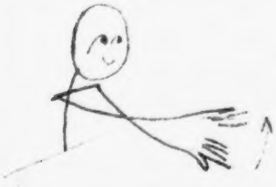
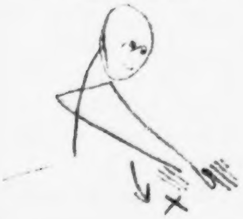
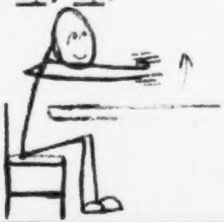
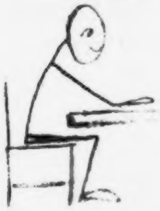
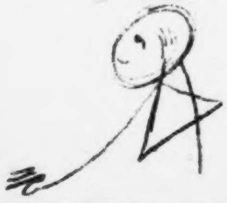
Poem

Open them, shut them,
Open them, shut them,
Bring them up slowly
To your rosey cheeks.
Open wide your shiney eyes,
And through your fingers peek.

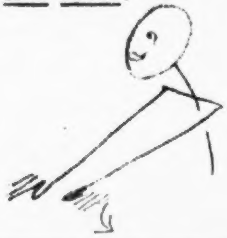
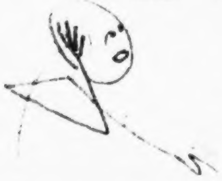
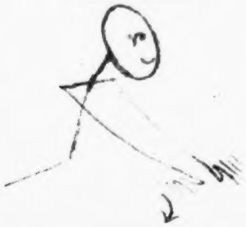
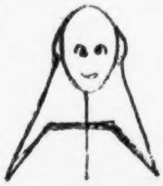
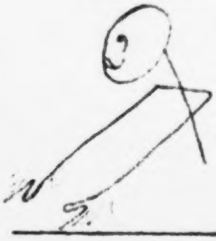
DOCUMENTATION CHART (H3-Group II)

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
1. My feet are flat. 1-5 	"Make sure your feet and legs are in front of your chair." "Keep your heels and toes down." "Keep your feet and toes straight ahead (do not cross them)."	Flex hips, knees and ankles, placing plantar surfaces of both feet on floor. Rotate knees so both feet are parallel.
My hands are flat. 1-5 	"Keep your palms flat." "Stretch your fingers." "Keep your thumbs out." "Keep your head up in the middle." "Your elbows should be straight."	Extend elbows to support upper trunk. Extend fingers and abduct thumbs, placing palmar surfaces on table.
I stretch my fingers. Stretch, Stretch 	"Stretch your fingers and get them apart." "Get your thumbs out." "Keep your hands on the table and elbows straight." "Keep your head up."	Extend elbows to support upper trunk. Extend fingers and abduct thumbs, placing palmar surfaces on table.
2. Left hand up. Up, Up 	"Keep your elbows straight." "Keep your right hand flat on the table." "Keep both feet flat on the floor." "Look at your left hand."	Extend right elbow to support upper trunk. Extend left elbow, retract left shoulder and lift left arm.
And down. 	"Put left hand down flat on the table." "Keep your elbows straight."	Protract left shoulder and place palmar surface of left hand on table.

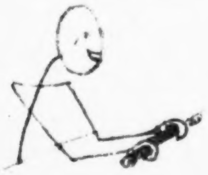
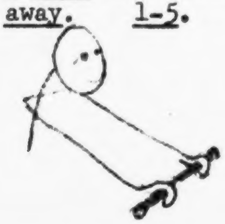
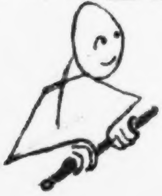
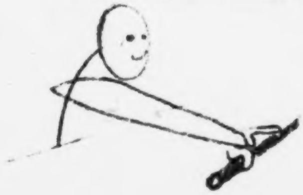
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches conscious inhibition of flexor withdrawal, stepping reflex, extensor thrust and adductor and abductor spasticity. Promotes a stable lower trunk. Prepares for weightbearing on legs and feet.	Functional free and/or supported sitting. Preparation for transference of self to other furniture for sitting.	Melody must achieve and maintain this position while sitting in an unadapted chair throughout the class. Only if and while she is able to maintain this position, she may work at the ensuing hand tasks.
Teaches voluntary inhibition of spastic hand flexion with adducted thumb. Prepares for thumb abduction, grasp and release. Prepares for voluntary righting of self in sitting position and weightbearing on arms and hands.	Voluntary grasp and release, stabilizing of objects on table surface, righting of self. Preparation for standing and/or walking.	Doreen, Lloyd and Nancy grab the plinth slats to aid in refixing or maintaining good sitting balance. Linda keeps hands flat on the table but keeps elbows off the table. Linda and Tim achieve and maintain elbows as straight as possible and trunk and head up.
Teaches voluntary inhibition of spastic hand flexion with adducted thumb. Prepares for thumb abduction, grasp and release. Teaches separation of fingers to prepare for thumb - index finger grasp.	Voluntary grasp and release, stabilizing and moving of objects on table, and thumb-finger opposition in grasping and manipulating objects.	
Promotes balance of trunk, as controlled arm extension and unilateral shoulder retraction occur. Prepares for range of motion while maintaining stable sitting. Teaches the fixing of some parts of the body while moving others. Teaches conscious inhibition of the ATNR and Moro reflex.	Eating. Lifting objects off the table. Reaching for objects.	Tim lifts his arm to almost 90° angle from the table and maintains straight elbows.
Promotes eye-hand coordination, and weightbearing on arms, hands and legs. Teaches conscious inhibition of the ATNR and Moro reflex.	Putting down and moving of objects on the table. Eating.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	*COMPLETE DESCRIPTION OF INTENDED MOVEMENT
Right hand up. Up, Up. 	"Keep your elbows straight." "Keep your left hand flat on the table." "Keep both feet flat on the floor." "Look at your right hand."	Extend right elbow to support upper trunk. Extend left elbow, retract right shoulder and lift right arm. Keep left hand on the table.
And down. 	"Put right hand down flat on the table." "Keep your elbows straight."	Protract right shoulder and place palmar surface of right hand on table.
3. Both hands up. Up, Up. 	"Keep your elbows straight." "Lift up with both arms at the same time." "Raise your arms as high as you can while keeping both feet on the floor and sitting well."	Symmetrically retract shoulder girdle to less than a 90° angle from the table while elbows remain extended.
And down. 	"Keep elbows straight." "Put both arms down at the same time." "Put hands flat on table."	Protract shoulder and place palmar surfaces of both hands on table.
4. Left hand to my left ear. 1-5. 	"Keep your hand open and touch your left ear or your head as close to your ear as you can." "Keep your head in the middle and other hand on the table."	Extend right elbow to support upper trunk. Flex left elbow to place palmar surface on the left ear.

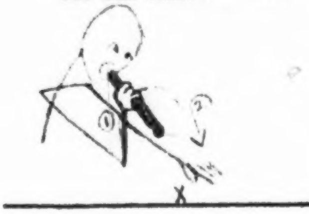
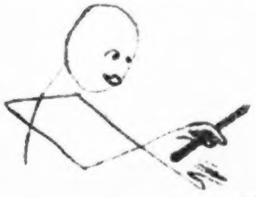
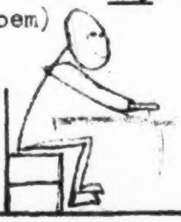
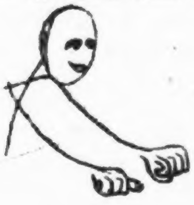
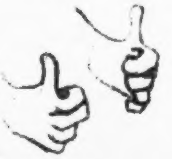
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes balance of trunk as controlled arm extension and unilateral shoulder retraction occur. Prepares for range of motion while maintaining stable sitting. Teaches the fixing of some parts of the body while moving others. Teaches conscious inhibition of the ATNR and Moro reflex.	Eating. Lifting objects off the table. Reaching for objects.	Tim lifts his arm to almost 90° angle from the table and maintains straight elbows.
Promotes eye-hand coordination, and weightbearing on arms, hands and legs. Teaches conscious inhibition of the ATNR and Moro reflex.	Putting down and moving of objects on the table. Eating.	
Promotes balance of trunk, as controlled arm extension and unilateral shoulder retraction occur. Prepares for range of motion while maintaining stable sitting. Teaches the fixing of some parts of the body while moving others. Teaches conscious inhibition of the ATNR and Moro reflex.	Eating. Lifting objects off the table. Reaching for objects. Drinking.	Tim lifts his arm to almost 90° angle from the table and maintains straight elbows.
Promotes eye-hand coordination, and weightbearing on arms, hands and legs. Teaches conscious inhibition of the ATNR and Moro reflex.	Drinking. Putting down and moving of objects on the table. Eating.	
Promotes finger extension when wrist is also in extension. Promotes asymmetrical arm movement, spatial awareness and weightbearing on arms and hands. Teaches conscious inhibition of ATNR.	Eating. Drinking. Dressing. Bathing. Washing. Grooming.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
And down. 	"Put left hand down flat on the table." "Keep your elbows straight."	Protract left shoulder and place palmar surface of left hand on table.
Right hand to my right ear. 1-5. 	"Keep your hand open and touch your right ear or your head as close to your ear as you can." "Keep your head in the middle, and other hand on the table."	Extend left elbow to support upper trunk. Flex right elbow to place palmar surface on the right ear.
And down. 	"Put right hand down flat on the table." "Keep your elbows straight."	Protract right shoulder and place palmar surface of right hand on table.
5. Both hands to both ears. 	"Keep your hands open." "Lean forward and bend both elbows, you can rest them on the table." "Keep your head in the middle and touch your head or ears with both your hands." "Keep feet flat on the floor."	Symmetrically flex elbows and place palmar surfaces on ears. Elbows support upper trunk.
And down. 	"Look at your hands." "Straighten both elbows at once." "Keep your hands open."	Protract shoulder and symmetrically extend elbows to place palmar surfaces flat on table.

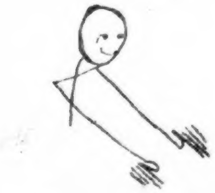
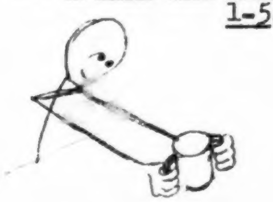
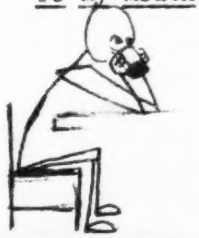
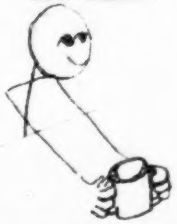
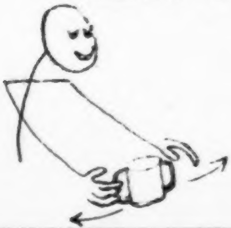
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes asymmetrical arm movement, eye-hand coordination, and spatial awareness. Teaches conscious inhibition of ATNR and Moro reflex.	Eating. Drinking. Dressing. Bathing. Washing. Grooming.	
Promotes finger extension when wrist is also in extension. Promotes asymmetrical arm movement, spatial awareness and weightbearing on arms and hands. Teaches conscious inhibition of ATNR.	Eating. Dressing. Drinking. Bathing. Washing. Grooming.	
Promotes asymmetrical arm movement, eye-hand coordination, and spatial awareness. Teaches conscious inhibition of ATNR and Moro reflex.	Eating. Drinking. Dressing. Bathing. Washing. Grooming.	
Promotes symmetrical arm movement at midline of body, fixing of elbows on a flat surface. Promotes finger extension when wrist is also in extension. Teaches conscious inhibition of ATNR and total flexion and labyrinthian patterns.	Eating. Drinking. Dressing. Bathing. Washing. Grooming.	Linda maintains elbows in toward the midline.
Promotes symmetrical elbow extension and shoulder girdle protraction. Teaches conscious inhibition of ATNR and STNR patterns. Promotes eye-hand coordination and weightbearing on hands, arms, feet to support the upper trunk.	Eating. Drinking. Dressing. Bathing. Washing. Grooming.	Linda maintains elbows in toward the midline.

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
6. I grab the stick. 1-5. 	"Grab the stick with both hands." "Thumbs should be under the stick." "Look at the stick when you grab it!"	Symmetrically extend fingers and abduct thumbs, then flex fingers around stick with thumb in opposition.
7. I push the stick away. 1-5. 	"Stretch both elbows." "Keep your wrists down." "Sit up tall."	Symmetrically extend elbows while maintaining grasp of stick.
(stick) To me. 	"Pull sticks to your stomachs." "Bend both elbows and keep the sticks on the table."	Symmetrically flex both elbows while maintaining grasp of stick.
Away. figure as in 7.	"Push the stick away." "Stretch both elbows." "Keep your wrists down." "Sit up tall."	Symmetrically extend elbows while maintaining grasp of stick.
8. I let go. 1-5. 	"Keep grabbing with your better hand and let go with the other one." "Put your free hand flat on the table in front of you." "Don't drop your stick on the floor, keep it on the table."	Extend fingers and outwardly rotate thumb of the non-preferred hand to release stick while grasp is maintained with preferred hand.

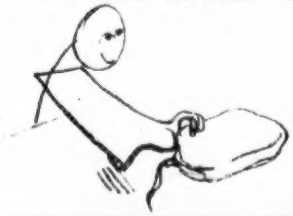
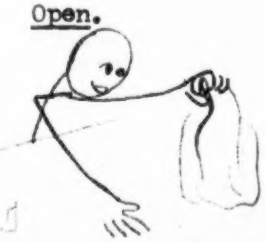
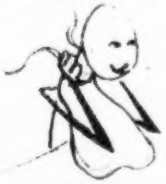
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes eye-hand coordination Teaches targeting onto an object and maintenance of grasp with extended elbows.	Standing. Sitting. Dressing. Bilateral grasp of any object.	
Teaches the concept of pushing, weightbearing on arms. Prepares for support of upper trunk. Promotes maintenance of grasp and elbow extension and flexion. Teaches conscious inhibition of ATNR.	Standing. Pushing of any object while in a sitting position. Reaching for and grasp of any object.	Linda fixes elbows on table toward the midline and gradually brings stick down, extending her elbows as much as possible.
Teaches the concept of pulling. Prepares for support of upper trunk in prone lying and for pushing body off the plinth. Teaches maintenance of grasp with flexed elbows. Promotes conscious inhibition of ATNR, Moro, and labyrinthian reflexes. Reinforces subsequent extension of arms.	Standing. Pushing off the plinth. Dressing. Pulling any object to the self.	Lori, Doreen and Lloyd partially flex arms, maintaining their grasp and good sitting balance.
Teaches the concept of pushing, weightbearing on arms. Prepares for support of upper trunk. Promotes maintanence of grasp and elbow extension and flexion. Teaches conscious inhibition of ATNR.	Standing. Pushing of any object while in a sitting position. Reaching for and grasp of any object.	Linda fixes elbows on table toward midline and gradually brings stick down, extending her elbows as much as possible.
Promotes keeping head in midline and balance of upper trunk as one hand moves to re-establish support. Teaches inhibition of ATNR and Moro reflex	Eating. Writing.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
9. To my mouth - ah-ah-ah-mmm (away) 	"Keep grabbing the stick with your best hand." "Bring the stick to your mouth as if it is a spoon." "Keep the other hand flat on the table."	Extend one elbow to support upper trunk. Maintain grasp of stick and flex one elbow and inwardly rotate forearm for a hand to mouth movement.
I let go. 1-5. 	"Look at the stick." "Put the stick into the box and let go when I come to you." "Keep your other arm straight and hand flat."	Extend fingers and outwardly rotate thumb of hand, holding stick to (target) direct it into the box and release it. Follow the stick with the eyes.
10. My hands are flat. 1-5. (Poem) 	"Keep your palms flat." "Stretch your fingers." "Keep your thumbs out." "Keep your head up in the middle." "Your elbows should be straight." "Keep your feet flat."	Extend elbows to support upper trunk. Extend fingers and abduct thumbs, placing palmar surfaces on table.
11. I make two fists. 1-5. 	"Thumbs outside the fists." "Keep elbows straight." "Look to see if your fists are tight."	Simultaneously flex fingers of both hands into fists while thumbs remain abducted.
I point up. 1-5. 	"Turn your fists over and point your thumbs up to the ceiling."	Extend elbows, outwardly rotate forearms and wrists, maintain fist with abducted thumbs.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes asymmetrical arm flexion and extension, eye-hand coordination and head control. Teaches conscious inhibition of ATNR.	Sitting. Eating. Writing.	
Promotes maintenance of head in the midline, eye-hand coordination and balance of upper trunk as one hand moves to re-establish support Teaches release in a confined area and inhibition of ATNR and Moro reflex.	Eating. Writing.	
Teaches voluntary inhibition of spastic hand flexion with adducted thumb. Prepares for thumb abduction, grasp and release. Prepares for voluntary righting of self in sitting position and weightbearing on arms and hands.	Voluntary grasp and release, stabilizing of objects on table surface, righting of self. Preparation for standing and/or walking.	Doreen, Lloyd and Nancy grab the plinth slats to aid in refixing or maintaining good sitting balance. Linda keeps hands flat on the table but keeps elbows off the table. Linda and Tim achieve and maintain elbows as straight as possible and trunk and head up.
Promotes bilateral grasp with elbows extended and head control. Prepares for grasping any object. Teaches inhibition of ATNR and Moro reflex.	Standing. Drinking. Dressing. Grasp of any object.	
Promotes symmetrical outward rotation of arms and hands while maintaining fists for grasping. Teaches conscious inhibition of the ATNR and Moro reflex.	Drinking. Washing. Functional grasp and manipulation of any object in this position.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
And flat. 1-5. 	"Keep elbows straight." "Turn open hands back."	Inwardly rotate the forearms and replace palmar surfaces of both hands on table.
12. I grab the cup. 1-5. 	"Reach for the cup and grab it." "Look at the cup while you are grabbing." "Hold the cup down on the table." "Keep your elbows straight."	Extend elbows and rotate arms and wrists outwardly. Target hands onto cup and flex fingers and abduct thumb to grasp handle.
To my mouth. 1-5. 	"Keep grabbing your cup and bring it to your mouth." "Look at the cup." "Keep your elbows on the table if you need to and lean forward."	Flex elbows symmetrically while grasping the cup. Fix elbows on table if needed and lean head forward, flexing at the hips.
And down. 	"Straighten your elbows and place your cup on the table." "Do not let go yet."	Extend elbows symmetrically, maintaining grasp on cup.
I let go. 1-5. 	"Let go of the cup with both hands, being careful not to tip it over." "Look at the cup while you are letting go."	Plantar-flex wrists and extend fingers to release cup.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes symmetrical extension and inward rotation of the arms. Promotes weight-bearing on hands and arms. Teaches conscious inhibition of STNR, ATNR and Moro reflex.	Drinking. Washing. Functional grasp and manipulation of any object in this position.	
Promotes symmetrical extension and outward rotation of arms while maintaining grasp. Promotes targeting, head control and grasp. Teaches conscious inhibition of ATNR and Moro reflex.	Drinking. Washing. Functional grasp and manipulation of any object in this position.	Linda grasps a glass with both hands with palm and fingers spread around it. She concentrates on better wrist rotation and keeps elbows in and straight as possible.
Promotes symmetrical outward rotation of arms and hands as well as simultaneous flexion of elbows, maintenance of grasp during a (lifting) movement, eye-hand coordination, hip flexion, maintenance of fixed elbows on table. Teaches conscious inhibition of ATNR and Moro reflex.	Drinking. Washing. Functional grasp and manipulation of any object in this position.	
Promotes symmetrical outward rotation of arms and hands as well as simultaneous extension of elbows, maintenance of grasp during a (lifting) movement, eye-hand coordination, maintenance of fixed elbows on table. Teaches conscious inhibition of ATNR and Moro reflex.	Drinking. Washing. Functional grasp and manipulation of any object in this position.	
Promotes symmetrical release of an object, simultaneous extension of elbows and wrists. Teaches conscious inhibition of ATNR, STNR and Moro reflex.	Drinking. Washing. Functional release of any object.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
13. I grab my bib. 1-5. 	"Grab your bib with your best hand" "Look at your bib." "Keep other hand on table."	Target preferred hand onto the bib. Flex fingers with abducted thumb and maintain grasp.
Open. 	"Keep grabbing your bib and shake it open." "Keep your other hand flat on the table and feet flat." "Look at the bib."	Extend elbows, retract one shoulder and maintain grasp.
14. To my neck. 1-5. 	"Keep grabbing the bib and bring it up to your neck." "Keep your other hand on the table."	Unilateral elbow flexion while maintaining grasp of object. Opposite elbow in extension in support upper trunk.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes head control, controlled targeting and functional grasp of preferred hand on an object and eye-hand coordination. Reinforces elbow extension and maintenance of grasp.	Dressing. Eating. Hand and face washing. Bathing. Grooming. Putting bib on.	
Promotes balance of trunk as controlled arm extension and unilateral shoulder retraction occur. Teaches conscious inhibition of ATNR and Moro reflex. Promotes maintenance of grasp and functional lifting of an object.	Dressing. Eating. Hand and face washing. Bathing. Grooming. Putting bib on.	
Promotes maintenance of grasp with flexed elbow and retracted shoulder, balance of upper trunk using one hand as support and inward rotation of the wrist. Teaches conscious inhibition of ATNR. Promotes functional manipulation of an object.	Dressing. Eating. Hand and face washing. Bathing. Grooming. Putting bib on.	

Pre-Meal Activities (II)

Bib Opening.

Some of the children target their preferred hand onto the bib, grasp and lift up to open it, while others have learned to open and bring the bib to the neck independently and are presently learning to tie it behind the neck. The maximum goal is to unfold, don the bib and tie it independently.

Prayers.

Group vocalization and verbalization is encouraged during the pre-meal prayer, which can be sung or spoken. The children put their hands together in the midline by clasping, interdigitating fingers or touching (matching) open hands together in a vertical plane, off the table, while being stabilized by elbows on the table. (The above functional tasks afford an opportunity for the application of the gross and fine motor skills learned throughout the day, particularly Hand Class skills.)

Pre-Meal Activities (I2)

In addition to prayers, which are essentially the same as in I1, the more severe children grab and shake open their bibs and bring them to their necks independently, to be tied by a teacher therapist, while the self-feeders have achieved a level of neatness which no longer requires the use of bibs. At present, the children are allowed to volunteer for special pre-meal duties which include squeezing out wash cloths, separating spit pans, pouring water, putting toothpaste on brushes, passing out bibs and toothbrushes, etc., pouring milk and dishing up food. These activities afford an opportunity to apply many of the gross and fine motor skills learned in plinths, standing and walking and hand class, as well as contribute to the children's feeling of independence and worthwhile functioning for the good of the group.

Drinking (J1)

Regardless of the amount of independent functioning possible for individual children, drinking is stressed as a bilateral activity. For this purpose, large, double-handled plastic cups are used. The child is encouraged to grasp the cup and continuously move it to and from his mouth while maintaining his elbows in a fixed position on the table. When he is finished, he extends his elbows to release it without tipping or spilling. This process requires simultaneous, symmetrical movement of the arms and hands together with wrist rotation and controlled voluntary grasp-release while maintaining a stable sitting position. Some children require various degrees of facilitation at the wrists to maintain grasp and complete the hand-to-mouth movement or in fixing the cup on the table, while others complete the task independently, concentrating on optimal sitting (feet flat on floor; hips flexed; both elbows on table) and equal use of both arms.

Moving About The Room (M1)

Each child moves about the room in a manner which ensures his safety and leads to eventual independent walking. Examples include -- sitting in a stable position on the chair while it is pulled by a teacher-therapist, pushing a chair for support in front or at the sides, or holding onto sticks or canes.

Moving About the Room (M2)

Moving about is similar to M1, but has been somewhat upgraded for most of the children. The more severe children are required to assume and maintain a stable sitting position without being held in the chair, (flexed hips, knees and ankles, head up in the middle and hands on the corners of their chairs) as they are pulled to their destination by a teacher therapist. At certain times of the day, these children are also given the opportunity to do some stepping for part of the change-of-place. There of the children walk the entire distance whenever a change-of-place in the room occurs throughout the day. Two of them are learning to don their own braces with assistance and walk using side supports, while the other one walks freely, requiring occasional verbal prompting for parts of the day and pushing a chair the remaining times.

Bedtime Activities (N1)

The more severe children are encouraged to roll onto their mattresses and position themselves for sleep (i.e., on side, back or stomach) while others go about making up their own beds and assisting those who are presently unable to complete the task independently. After the pajamas are on and beds are ready, the children who are able to move about the room independently are allowed to perform special tasks, such as passing out the washing and toothbrushing materials in their prescribed places for the following morning. When time allows, letters from home can be read, a story read, puppet show performed, or songs sung by the group. Some children prefer to do school work using reading books or prepared work sheets during this time.

Pushing Off and Pulling Onto The Plinth (01)

Whenever any of the children move from the plinth to any other point in the room, it is done in the manner prescribed by the last intentions of the Plinth Series (P3) The child rolls onto his stomach and grasps the plinth slats with both hands. He then slides his hands along the slats to shoulder level and pushes back with his arms in an alternating flexion-extension pattern while keeping his body symmetrical, hips and legs extended and head in the midline. When his feet touch the floor, he puts them flat, and while maintaining his grasp on the plinth, stands and slowly lowers himself onto a pot or chair. Complete independence in this change of place is the goal.

When moving onto the plinth, the child stands up from his chair or pot while grasping the plinth and pulls himself up onto it by alternately flexing and extending his elbows. The body remains symmetrical and head in the midline.

Plinth Series: General Description and Rationale (P)

The first activity of the day, the Plinth Series, is designed to teach those gross motor skills which will later be applied in almost every situation following it. The tasks in the Plinth Series are, for the most part, carried out in a lying position and involve the entire body. The Plinth Series prepares the child for Hand Class and also for Standing and Walking as well as the majority of the applications. For instance, such skills as voluntary hip flexion, grasp and release patterns, elbow extension, knee flexion and ankle dorsiflexion are essential.for stable sitting in the Hand Class series. Preparation in Plinths, therefore, allows the child to be more successful in his completion of the hand tasks. In much the same way, skills such as knee extension, ankle dorsiflexion, alternate flexion and extension of the legs and grasp lead to improved weight-bearing and stepping for the Standing and Walking Class.

Body Orientation

In any task series, including Plinths, the intention chanted by the group such as "I slide my hands to me," refers to a specific movement. However, while flexing both elbows symmetrically to bring hands to chest level, the child is also instructed to maintain hip and knee extension and head in the midline. The "whole body" awareness improves body image perception, of course, but emphasizes the inhibition of non-functional reflex patterns in the pursuit of correct performance. In other words, using a total flexion pattern, the child would be able to bring his hands symmetrically to chest level (approximately) by ventroflexing his head, but this would cause hip, knee and ankle flexion as well and this kind of solving is unacceptable. In order to complete the motor task correctly and follow all instructions, the child must consciously inhibit the reflex pattern and move in a way that will lead to more independent functioning. All tasks set forth in the Plinth Series (and all other activities) are designed to teach this conscious inhibition of primitive, abnormal reflexes (see Plinth Series Documentation - rationale columns).

Movement Variations

Every task series has a unique pattern of complexity, which allows the same movement to be repeated by the group in several ways. In the Plinth Series, for example, the following progression of tasks might occur: (a) In supine lying, the group extends arms above heads and lowers them again to sides (this may be done with hands open or clenched.

(b) After rolling to prone and performing other tasks, the group returns to the supine position, and again raises arms above heads. This time, however, the requirement is to first make fists with both hands while the arms are extended at the sides and then raise and lower the arms, maintaining fists throughout. (c) The same pattern is repeated with increased complexity by grasping sticks while arms are down and continue holding them while arms are raised and lowered.

The above progression is one small example of the way in which one movement may be expanded to become more complex and thus teach more motor skills.

Although the child usually begins the series in a supine position, he may work in prone or on his side as well. The change of place from one position to another affords a sense of independent moving and may be further expanded to include turning the body 180 degrees horizontally (reversing head and feet in relation to plinth) while in a prone or supine position. Each Plinth Series usually includes some form of coming to a sit, either from a prone, supine or side-lying position, thus putting a major emphasis on voluntary hip flexion.

Range of Abilities

Plinth tasks are designed to change basic body positions and movements to make them more functional and appear more normal. Since each child within a given group has a different basic body position from the others and movements which are abnormal in various ways, each task presented by the series affects him in a unique way. For example, a child who habitually assumes the Asymmetric Tonic Neck Reflex position in supine requires tasks that bring the body into symmetry. For the very lowest level of ability, the task of bringing the head into the midline and maintaining it there might be the focus of the child's independent motor learning. Within the same group, work on body symmetry for a child who is more capable of consciously inhibiting the ATNR position, might include independent extension of the legs and arms (at sides) with the head in the midline in a supine position. Each child would require different amounts and types of facilitation to accomplish those tasks in the series dealing with body symmetry, although the stated intentions would remain the same for both children and both would function within the same group.

Task Modifications

A specific example of task modification might be simplifying the task designated by the intention, "I clasp my hands."

Most of the group would be instructed to do this in a supine position and clasp hands with fingers interdigitated over their chests. One or more children, however, because of a flexor spasticity and retracted shoulder girdle, might be unable to extend elbows and fingers forward to bring hands together in the midline with fingers in between. For them the task could be modified to enable them to function independently by rolling to one side and clasping hands (palms together).

A second example of task modification might include upgrading of the task as in the intention, "I stand up" during which a child who is capable of standing independently without support would do so by clasping hands together above the plinth at shoulder level. At that time, the rest of the group would retain grasp of the plinth for support. (See Definition of Terms section of the Introduction).

A single intention, therefore, might imply different task modifications for different children.

Applications

Preparation for applications may be seen in extending the arms over the head for pulling shirts up, crossing the midline for bathing or extending arms by sides to pull pants up. (See documentation charts - application column.)

Perceptual Awareness

The Plinth Series provides the most stable and secure position for movement - lying. Here, tasks may be accomplished which involve the movement of several body parts without fear of falling. Those tasks which involve touching one body part with another ("I put my hand on my neck."), or a right-left orientation ("Left foot up.") or awareness of the entire body in space ("I roll onto my stomach.") or any number of similar movements tend to increase the child's understanding of body image and movement. His increased awareness of his body and how it moves serves to improve his performance in both the activities and applications which follow the Plinth Series.

Plinth Series

The movements taught in this plinth series were specifically aimed toward weightbearing on arms, hands, and legs, body symmetry, turning and rolling. Extension-flexion, abduction-adduction of hands and legs, grasp and release, and head control, which were also involved in this plinth series, promote the learning of the specific goals. All these skills are involved in learning to sit and stand.

PLINTH SERIES February, 1971

Group begins in supine lying.

1. My legs are straight. 1-5.	LuAnn - toes to ceiling Nancy - maintain.
2. I put my arms down by my sides. 1-5.	
3. I lie straight. (and still). 1-5.	
4. I put my arms out to the sides. 1-5.	
5. I stretch my arms above my head. 1-5.	
6. I roll right. 1-5.	Quickly.
7. I stretch my arms above my head. 1-5.	
8. I slide my hands to my chest. 1-5.	
9. I push up - up - up.	Hands flat.
10. Down. Vowels or syllables.	
Repeat 9 and 10	
11. I stretch my arms. 1-5.	
12. I roll back. Back - back.	Quickly.
13. My legs are straight. 1-5.	Song or poem if desired.
14. I put my legs apart. 1-5.	
15. Together. 1-5.	Touch knees.
Repeat 14 and 15	
16. I turn around. 1-2.	Remain on backs throughout.
17. I roll left. 1-5.	Quickly.
18. I pull down to the chair	Those who are close enough must lie straight.
19. I grab the chair. 1-5.	All grab together.
Repeat for other hand	
20. My legs are straight. 1-5.	

21. My elbows are straight. 1-5. (song or poem)

Legs remain straight.

22. I let go. 1-5.
23. I turn around. 1-2.
24. I roll over. 1-5.
25. My legs are straight. 1-5.
26. I slide my left foot up. 1-5.
27. I slide it back. 1-5.

For those for whom it is easy, do slowly and controlled.

Repeat with right foot and both together.

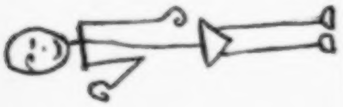
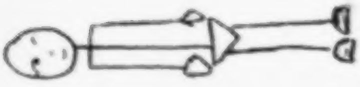
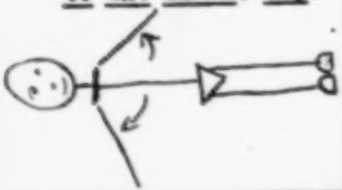
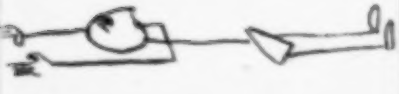
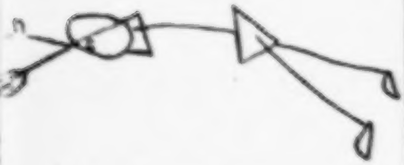
28. I slide both feet up. 1-5.
29. I pull my knees apart. 1-5.
30. Together. 1-5.

Linda - only until they begin to hurt. Slowly with help.

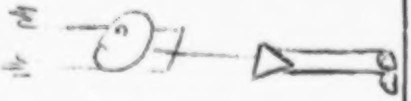
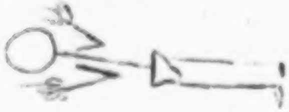
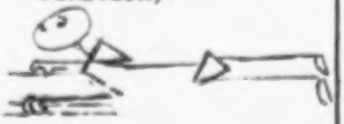
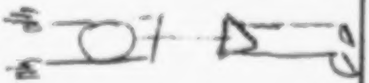
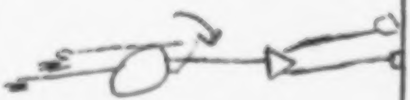
31. My legs are straight. 1-5.
32. I roll over. 1-5.
33. I push off. 1-5.

State goals and only count once.

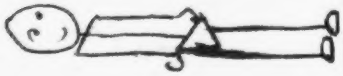
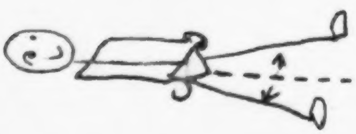
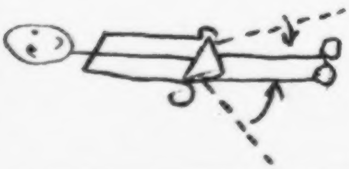
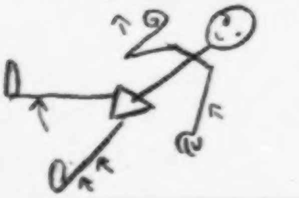
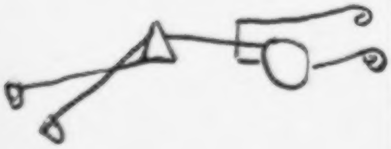
DOCUMENTATION CHART (P1)

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
1. My legs are straight. 1-5. 	"Point your toes to the ceiling and straighten your legs." "Keep your head in the middle."	Extend knees maximally keeping feet dorsiflexed.
I put my arms down by my sides. 1-5. 	"Keep your head in the middle." "You may grab the plinth to help keep your arms down." "Make sure your legs are straight."	Extend arms and place hands (palmar surface down) on plinths.
2. I put my arms out to the sides. 1-5. 	"Keep your arms straight and try to touch your neighbor at your sides." "Your legs should be straight and your head in the middle."	Extend elbows maximally out to the sides of the body.
3. I stretch my arms above my head. 1-5. 	"Stretch your arms above your head while you keep your head in the middle." "Your legs should stay straight." "Stretch your elbows so they are straight."	Extend elbows maximally above head.
4. I roll right. 1-5. 	"Put your head on your right arm." "Keep your arms up and roll quickly." "Stay on your own plinth."	Roll from supine to prone in a segmental pattern.

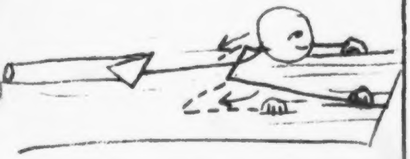
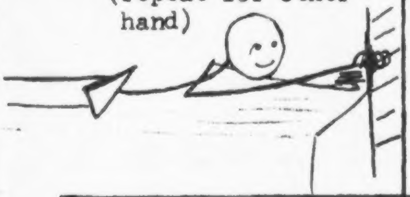
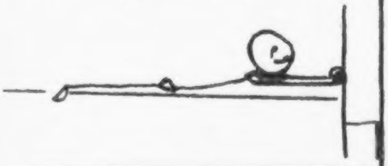
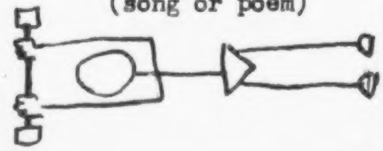
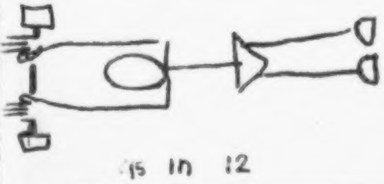
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes head control and weightbearing.	Sitting. Standing.	
Teaches conscious inhibition of ATNR and Moro reflexes. Promotes body symmetry, head control and grasp.	Sitting. Standing. Pulling up pants.	
Teaches conscious inhibition of ATNR and Moro reflexes. Promotes head control and weightbearing.	Sitting. Standing.	
Teaches conscious inhibition of arm flexion pattern.	Putting shirt over head in dressing.	
Promotes segmental rolling and head control. Promotes spatial awareness.	Change of place from supine to prone for pushing off the plinth.	

INTONATION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
I stretch my arms above my head. 1-5. 	"Your arms should still be above your head from rolling." "Keep your legs straight and stomachs flat."	Extend elbows maximally forward with shoulder girdle protracted.
5. I slide my hands to my chest. 1-5. 	"Slide your hands to your chest." "Keep them flat on the plinth." "Legs should be straight and stomachs flat."	Palmar surfaces of hands symmetrically slide to chest level. Elbows flexed.
I push up, up, up. Down. (verbalize vowel syllable combination) 	"Lift head up in the middle." "Keep your stomach flat and legs straight." "Keep your heads up and say (boo)."	Extend elbows to support, lift upper trunk up, then flex elbows to lower trunk.
6. I stretch my arms. 1-5. 	"Your arms should be very straight." "Keep your legs straight and stomachs flat."	Extend elbows maximally forward with shoulder girdle protracted.
7. I roll back. Back. 	"Put your head on your arm and keep your arms straight while you roll." "Keep your legs straight." "Stay on your own plinth."	Roll from prone to supine in a segmental pattern.

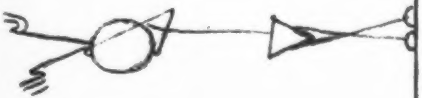
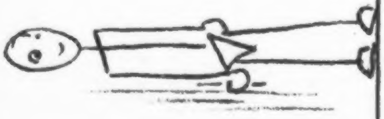
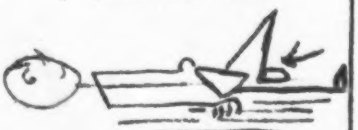
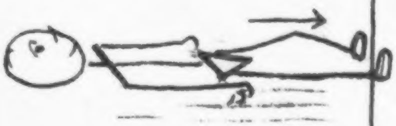
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches conscious inhibition of total flexion pattern in prone.	Sitting. Standing.	
Teaches conscious inhibition of total flexion pattern in prone, and STNR. Teaches symmetrical flexion and extension. Promotes weight-bearing on arms and hands and lower body symmetry.	Change of place by pushing off.	
Teaches conscious inhibition of STNR and tonic labyrinthine. Promotes head control, lower body symmetry and weightbearing on arms and hands.	Change of place by pushing off. Sitting. Standing.	
Teaches conscious inhibition of total flexion pattern in prone.	Standing. Sitting.	
Promotes segmental rolling and head control. Promotes spatial awareness.	Change of place from prone to supine.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
8. My legs are straight. 1-5. Song or poem 	"Point your toes to the ceiling and straighten your legs." "Keep your head in the middle and your arms down."	Extend knees maximally, keeping feet dorsiflexed.
I put my legs apart. 1-5. 	"Keep your toes pointing to the ceiling and your legs straight." "Head in the middle and arms down." "Take your legs apart."	Extend knees maximally. Keep feet dorsiflexed. Abduct legs.
Together. 1-5. 	"Keep your legs straight and bring your legs together." "Head in the middle and arms down." "Toes should be pointing up."	Extend knees maximally. Keep feet dorsiflexed. Adduct legs.
9. I turn around. 1-2. 	"Use your hands to help you turn around." "Your head should be down here and feet up there." "Keep your legs straight and stay on your backs."	Extend knees maximally to lift leg, then abduct and adduct legs. Arms extend and flex to pull and push upper trunk.
10. I roll left. 1-5. 	"Stretch your arms above your head." "Put your head on your left arm and keep your arms up and legs straight while you roll." "Stay on your own plinth."	Roll from supine to prone in segmental pattern.

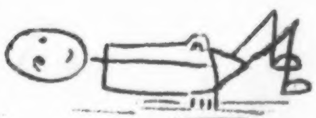
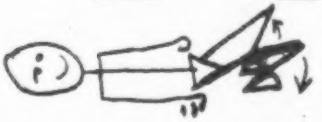
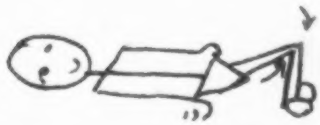
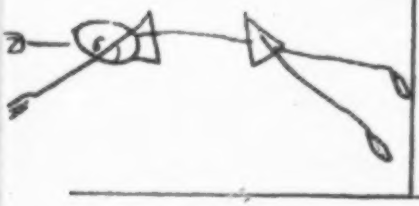
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes body symmetry. Prepares for weightbearing. Teaches conscious inhibition of ATNR and Moro reflexes.	Sitting. Standing.	
Promotes body symmetry. Prepares for weightbearing. Teaches conscious inhibition of crossed extension and ATNR. Teaches voluntary abduction of legs.	Standing. Stepping.	
Promotes body symmetry. Prepares for weightbearing. Teaches conscious inhibition of crossed extension and ATNR. Teaches voluntary adduction of legs.	Standing. Stepping.	
Prepares for weightbearing on arms, hands and legs. Teaches conscious inhibition of crossed extension. Teaches voluntary abduction and adduction of legs. Promotes spatial awareness.	Change of place. Standing. Stepping.	
Promotes segmental rolling and head control. Promotes spatial awareness.	Change of place from supine to prone.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
11. I pull down to the chair. 1-5. 	"Pull down so you can touch the chair rung." "Look where you're going." "Keep your legs straight." "Grab the plinth."	While grasping plinth alternately extend one arm then the other and simultaneously flex elbows to propel body forward.
12. I grab the chair. 1-5. (repeat for other hand) 	"Look at the rung and grab it with both hands." "Stay flat on your stomach with legs nice and straight." "Grab with one hand and then the other."	Extend fingers and abduct thumb,then flex fingers to grasp chair rung.
My legs are straight. 1-5. 	"Keep grabbing." "Your stomachs should be flat."	Extend knees and hips in prone position.
My elbows are straight. 1-5. (song or poem) 	"Head in the middle and stretch your elbows until they are straight." "Keep grabbing." "Your stomachs should be flat."	Extend elbows maximally while maintaining grasp.
I let go. 1-5.  15 in 12	"Look at your hands while you let go." "Keep your elbows and legs straight."	Extend fingers and abduct thumbs to release chair rung.

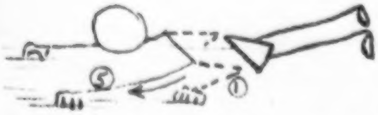
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches asymmetrical extension and symmetrical flexion. Teaches ability to use hands and arms while lower body is stationary and symmetrical. Promotes weightbearing on hands, and grasp.	Change of place to pull on.	
Teaches symmetrical movement of hand and arm to target. Promotes grasp and eye-hand coordination.	Grasp of any object. Standing.	
Teaches conscious inhibition of STNR, Moro and total flexion patterns in prone.	Standing.	
Teaches conscious inhibition of total flexion in prone. Prepares for weightbearing on hands and arms.	Grasp of any object. Standing.	
Teaches ability to use hands and arms while keeping lower body stationary and symmetrical. Promotes grasp and release.	Grasp and release of any object.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
13. I turn around. 1-2. as in 9	"Use your hands to help you turn around." "Keep your legs straight and stomachs flat." "Your head should be here and your feet up there."	Arms extend and flex to pull and push upper trunk. Extend knees maximally to lift leg, then abduct and adduct legs.
14. I roll over. 1-5. 	"Put your head on your straight arm." "Keep your arms and legs straight." "Stay on your own plinth."	Roll from prone to supine in a segmental pattern.
15. My legs are straight. 1-5. 	"Straighten your legs and point your toes to the ceiling." "Keep your head in the middle and your arms down."	Extend knees maximally, keeping feet dorsiflexed. Extend arms and place hands (palmar surface down) on plinths.
16. I slide my left foot up. 1-5. 	"Keep your right leg straight while you slide your left foot up." "Keep your foot flat as you slide it up." Your arms should stay down and head in the middle."	Flex left hip and knee as foot remains dorsiflexed and entire plantar surface remains on plinth.
I slide it back. 1-5. 	"Slide your left foot down keeping it on the plinth." "Both legs should be straight and your head in the middle."	Slide plantar surface of left foot down plinth until knee is maximally extended, keeping the knee in midline position.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Prepares for weightbearing on arms, hands and legs. Teaches conscious inhibition of total flexion pattern. Teaches voluntary abduction and adduction of legs. Promotes spatial awareness.	Change of place. Standing.	
Promotes segmental rolling and head control. Promotes spatial awareness.	Change of place from prone to supine.	
Promotes body symmetry. Prepares for weightbearing.	Standing.	
Teaches conscious inhibition of ATNR, flexor withdrawal and crossed extension patterns. Promotes dorsiflexion of ankles, body symmetry, weightbearing, and spatial awareness.	Standing. Stepping.	
Teaches conscious inhibition of ATNR, crossed extension and flexor withdrawal. Promotes dorsiflexion of ankles, body symmetry and weightbearing.	Standing. Stepping.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
I slide my right foot up. 1-5. as in 16	"Keep your left leg straight while you slide your right leg up." "Keep your foot flat as you slide it up." "Your arms should stay down and head in the middle."	Flex right hip and knee as foot remains dorsiflexed and entire plantar surface remains on the plinth.
I slide it back. 1-5.	"Slide your right foot down keeping it on the plinth." "Both legs should be straight and your head in the middle."	Slide plantar surface of right foot down plinth until knee is maximally extended, keeping the knee in midline position.
I slide both feet up. 1-5. 	"Slide both feet up while keeping them on the plinth." "Keep your arms down and your head in the middle." "Your feet should be flat and knees pointing up."	Flex both hips and knees keeping plantar surface of both feet on plinth.
17. I pull my knees apart. 1-5. 	"Keep your feet flat while your knees are apart." "Arms down and head in the middle."	Abduct and outwardly rotate legs while knees, hips and ankles remain flexed.
Together. 1-5. 	"Keep your feet flat, arms down and heads in the middle." "Keep your knees pointing straight upwards." "Your knees may touch."	Adduct legs while knees, hips and ankles remain flexed and plantar surface of feet remain on plinth.
18. I roll over. 1-5. 	"Put your head on your straight arm." "Keep your arms and legs straight while you roll." "Stay on your own plinth."	Roll from supine to prone in a segmental pattern.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches conscious inhibition of ATNR, flexor withdrawal and crossed extension patterns. Promotes dorsiflexion of ankles, body symmetry, weight-bearing, and spatial awareness	Standing. Stepping.	
Teaches conscious inhibition of ATNR, crossed extension and flexor withdrawal. Promotes dorsiflexion of ankles, body symmetry and weightbearing.	Standing. Stepping.	
Teaches conscious inhibition of ATNR, flexor withdrawal, and extensor thrust. Promotes dorsiflexion of ankles.	Sitting.	
Teaches voluntary outward rotation and abduction of legs. Promotes weight-bearing.	Standing. Sitting. Balance.	
Teaches voluntary adduction of legs.	Sitting. Standing.	
Promotes segmental rolling and head control. Promotes spatial awareness.	Change of place from supine to prone.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
19. I push off. 1-5.  	"Slide one hand to your chest (1) then the other hand to your chest (2), now push back." "Keep your stomach flat, legs straight, and head in the middle."	While maintaining grasp on plinth, alternately slide one hand to shoulder level, then other, and simultaneously extend elbows.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches conscious inhibition of STNR. Teaches asymmetrical flexion of elbows and symmetrical extension. Promotes weightbearing on hands, grasp and lower body symmetry.	Change of place by pushing off.	

Plinth Series (P2)

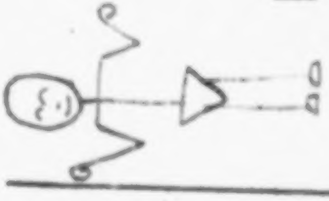
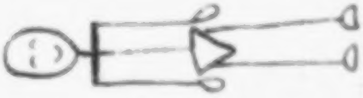
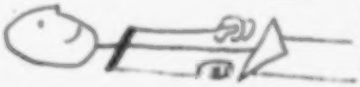
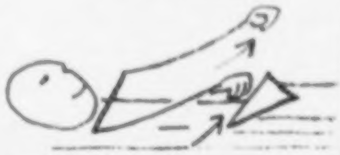
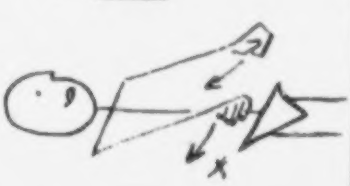
This afternoon Plinth Series was devised to reinforce and refine those motor skills introduced in Plinth Series (P1) carried out in the morning. Many of the movements taught are similar to those in the morning series, but are changed slightly to retain the group's interest and provide new challenges.

SMALL PLINTHS (P2)

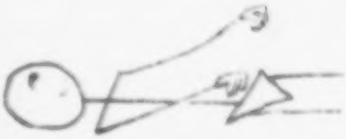
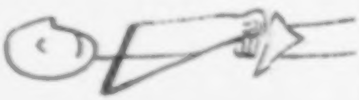
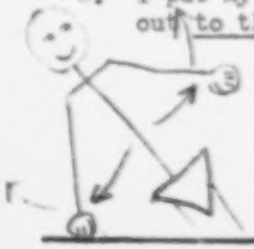
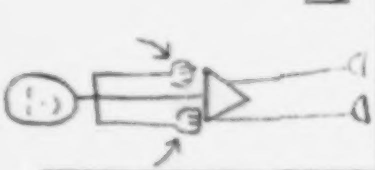
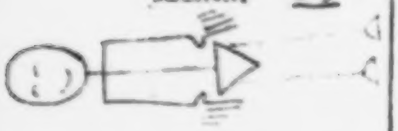
I lie straight. 1-5
My arms are by my sides. 1-5
I make two fists. 1-5
I raise my fists up - up - up.
Down.
I raise my fists up - up - up.
I put my fists together. 1-5
I put my fists out to the sides. 1-5
I put my fists down by my sides. 1-5
I put my hands flat on the plinth. 1-5
I make two fists. 1-5

I slide down (to end of plinth). 1-5
My legs hang over. 1-5
My feet are flat on my chair. 1-5
I grab the sticks. 1-5
I put my sticks up - up - up.
I put my sticks to the sides. 1-5
Back.
I grab one stick with both hands. 1-5
I put my stick on my tummy. 1-5
I sit up. 1-5
I lie back down. 1-5
I put my arms above my head. 1-5
I roll on my tummy. 1-5
I push off. 1-5

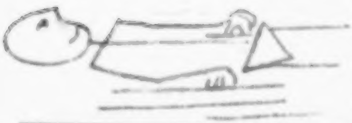
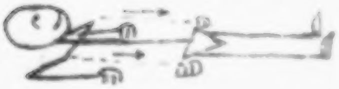
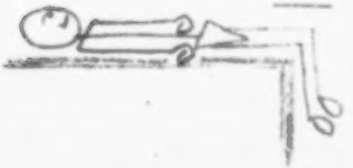
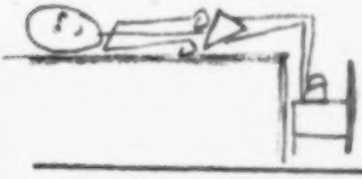
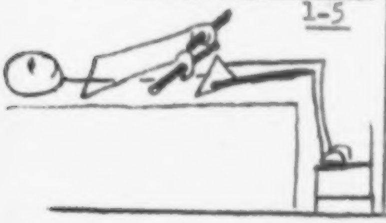
DOCUMENTATION CHART (P2)

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
1. I lie straight. 1-5 	"Straighten both legs." "Head in middle."	Maximally extend knees and hips. Place head in midline. Dorsiflex ankles at 90°.
2. My arms are by my sides. 1-5 	"Stretch your elbows." "Head in the middle." "Keep your legs straight."	Protract shoulder girdle, extend elbows maximally.
3. I make two fists. 1-5 	"Thumbs on the outside." "Head in the middle." "Keep your legs straight."	Maximally flex fingers of both hands; abduct and flex thumb.
4. I raise my fists up - up - up. 	"Head in the middle." "Raise both arms at once." "Keep your fists tight." "Keep your legs straight."	Retract shoulder girdle to lift fists off surface of plinth. Maintain extended elbows.
5. Down. 		Protract shoulder girdle. Inwardly rotate forearm to replace fists on plinth.

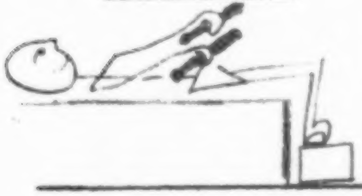
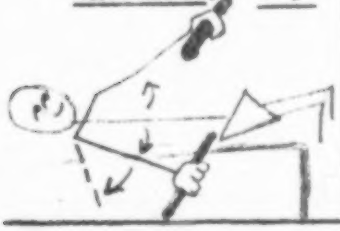
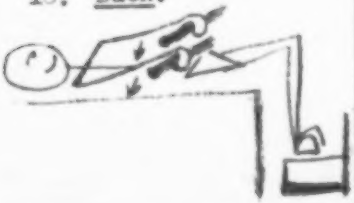
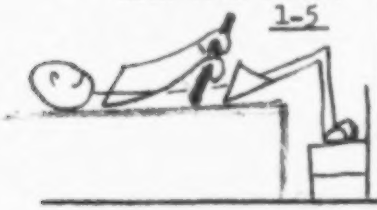
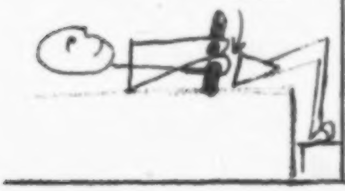
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches conscious inhibition of ATNR, STNR. Promotes body symmetry of lower extremity.	Standing. Dressing.	
Teaches conscious inhibition of ATNR, Moro reflex. Promotes total body symmetry and prepares for controlled movements and stabilization of body while one part moves.	Standing. Dressing. Sitting.	
Teaches maintenance of body symmetry while bilateral movement is performed. Promotes voluntary grasp.	Standing. Sitting. Eating.	
Teaches conscious inhibition of ATNR, STNR. Teaches bilateral extension.	Dressing. Handwashing. Grabbing for support at front while sitting.	
Teaches conscious inhibition of ATNR, Moro reflex. Promotes re-establishment of basic body symmetry after movements.	Standing. Sitting.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
6. I raise my fists up - up - up 	"Head in the middle." "Raise both arms at once." "Keep your fists tight." "Keep your legs straight."	Retract shoulder girdle to lift fists off surface of plinth.
7. I put my fists together. 1-5 	"Keep your elbows straight." "Touch your fists together."	Retract shoulder girdle and adduct both arms to touch fists together while maintaining elbow extension.
8. I put my fists out to the sides. 1-5 	"Touch your neighbors' hands." "Move both arms at once." "Head in the middle."	Abduct arms simultaneously at 90° to body, maintaining elbow extension.
9. I put my fists down by my sides. 1-5 	"Bring your straight arms down to your sides." "Keep your fists tight."	Adduct arms simultaneously to replace fists by sides.
10. I put my hands flat on the plinth. 1-5 	"Stretch your fingers." "You may grab the plinth." "Keep your legs and elbows straight."	Extend fingers maximally, abduct thumbs so palmar surfaces are on plinth.

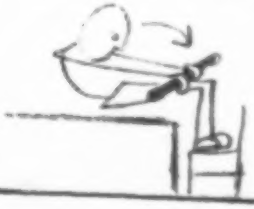
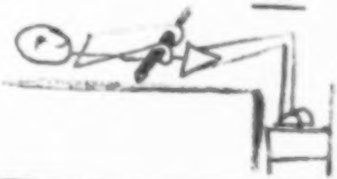
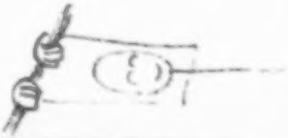
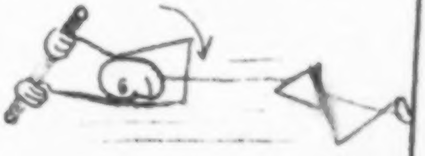
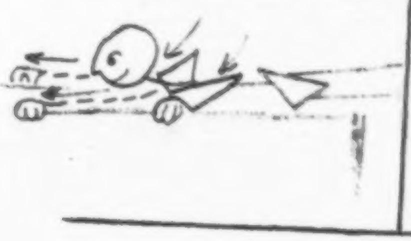
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches conscious inhibition of ATNR, STNR. Teaches bilateral extension.	Dressing. Handwashing. Grabbing for support at front while sitting.	
Teaches conscious inhibition of ATNR and Moro reflex. Promotes symmetrical arm movement to the midline.	Handwashing. Bathing. Dressing. Buttoning.	Mark lies on side.
Teaches conscious inhibition of ATNR and Moro reflex. Promotes symmetrical movement away from midline.	Sitting freely. Grooming. Dressing.	
Promotes maintenance of body symmetry, symmetrical use of arms, and coordination.	Standing between 2 chairs. Sitting freely.	
Promotes voluntary release; prepares for grasp.	Pushing off plinth. Stabilizing object while sitting at table. Functional grasp and release.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
11. I grab the plinth. 1-5 	"Grab the plinth with both hands." "Keep your head in the middle."	Maximally flex fingers of both hands; abduct and flex thumbs.
12. I slide down (to end of plinth). 1-5 	"Pull yourself down to the end of the plinth." "Keep your legs straight and head in the middle."	Maximally flex fingers and thumbs; simultaneously flex and extend arms to pull body down to end of plinth (knee level- lower legs hang over).
13. My legs hang over. 1-5 	"Bend both knees." "Head in the middle." "Keep your arms at your sides."	Flex both knees at 90° over edge of plinth.
14. My feet are flat on my chair. 1-5 	"Get your heels down." "Point your feet straight ahead." "Keep your arms down."	Dorsiflex both ankles, rotate legs inwardly (or outwardly) to align feet.
15. I grab the sticks. 1-5 	"Grab both sticks at once." "Keep your feet flat on the chair."	Retract shoulders; flex fingers of both hands and abduct thumbs.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes voluntary grasp.	Eating. Grooming. Pushing off, pulling on plinth. Sitting with chair for support.	
Teaches conscious inhibition of ATNR, Moro reflex. Promotes symmetrical body movement in horizontal plane.	Eating. Grooming. Pushing off, pulling on plinth. Sitting with chair for support. Grasp and release.	
Teaches voluntary inhibition of ATNR. Promotes knee flexion Prepares for stable sitting.	Sitting. Eating.	
Teaches voluntary inhibition of extensor thrust, stepping reflex and flexor withdrawal. Promotes 90° flexion at knees and ankles.	Sitting.	
Teaches voluntary inhibition of ATNR. Promotes symmetrical grasp and eye-hand coordination.	Eating. Grooming. Standing with chair. Writing. Bathing.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
16. I put my sticks up - up - up. 	"Look at your sticks." "Keep your head in the middle." "Keep your feet flat on the chair."	Retract shoulders. Maintain extended elbows. Maintain flexion of fingers.
17. I put my sticks to the sides. 1-5 	"Head in the middle." "Reach out and touch your neighbors with your sticks."	Abduct arms simultaneously. Maintain elbow extension and grasp.
18. Back. 	"Slide your sticks back to your sides."	Protract shoulder girdle. Maintain elbow extension and grasp.
19. I grab one stick with both hands. 1-5 	"Head in the middle." "Look at the stick and grab it with both hands."	Extend fingers. Adduct arms to midline. Flex fingers, abduct thumbs.
20. I Put my stick on my tummy. 1-5 	"Straighten your elbows." "Keep grabbing." "Put your stick on your tummy."	Extend elbows. Maintain grasp.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches voluntary inhibition of ATNR. Promotes smooth flowing bilateral movement.	Dressing.	
Teaches conscious inhibition of spastic flexion and inward rotation in arms. Promotes free use of arms and enlarged concept of space around body.	Sitting freely. Dressing.	
Teaches voluntary inhibition of ATNR. Promotes maintenance of body symmetry and bilateral grasp.	Writing. Sitting.	
Promotes voluntary grasp and release, and symmetrical movement at the midline; eye-hand coordination.	Dressing. Buttoning. Sitting. Walking.	
Teaches voluntary inhibition of Moro reflex and ATNR. Promotes body symmetry.	Sitting with supporting chair. Walking with chair. Stable sitting at table.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
21. I sit up. 1-5 	"Head in the middle." "Push the stick to your knees as you sit up."	Contract abdominal muscles, flex hips. Maintain extended elbows.
22. I lie back down. 1-5 	"Head in the middle." "Slowly lie back."	Slowly relax abdominal muscles.
23. I put my arms above my head. 1-5 	"Both arms up at once." "Head in the middle." "Keep your elbows straight."	Retract shoulder girdle. Extend elbows.
24. I roll on my tummy. 1-5 	"Put your cheek on whichever arm you'll roll toward." "Keep your legs straight."	Complete segmental roll. Maintain body symmetry.
25. I push off. 1-5 	"Head in the middle, straighten your legs." "Grab the plinth and push off."	Alternately flex and extend elbows keeping fingers flexed, thumbs abducted.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes active strengthening of trunk support muscles necessary for sitting balance. Teaches conscious inhibition of total flexion.	Sitting. Standing. All table activities.	
Promotes controlled co-contraction of supporting trunk muscles.	Sitting. Dressing. Bathing.	
Teaches conscious inhibition of Moro reflex and ATNR. Promotes body symmetry and enlarged spatial concept.	Dressing. Moving about on plinth. Standing from a sit.	
Teaches conscious inhibition of ATNR, and total flexion. Promotes functional muscle patterns using body symmetry.	Dressing. Moving about on plinth.	
Teaches conscious inhibition of Moro reflex, STNR, labyrinthine reflex. Promotes bilateral arm use while stabilizing lower trunk.	Sitting. Standing. Moving about on plinth.	

Plinth Series (P3)

The movements taught by this specific Plinth Series are those prominently involved in weightbearing, stepping and rolling. The learning of these movements promotes voluntary knee extension and flexion of the knee, hip and ankle on one side while the other side remains in extension. Other skills included are segmental rolling, voluntary grasp and release and head control while in prone.

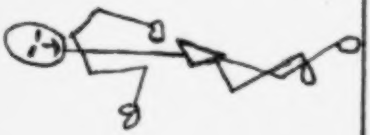
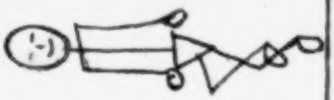
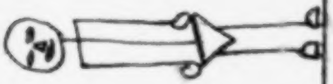
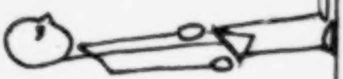
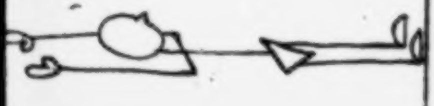
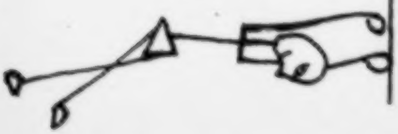
The plinths are arranged in a single row with a ladder-back chair at the head of each and the foot pulled out approximately three feet from the wall. The children begin in a supine lying position.

NEW PLINTH SERIES (P3) March, 1971

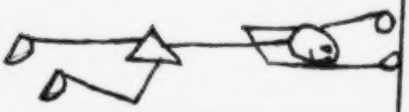
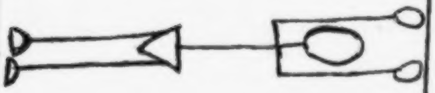
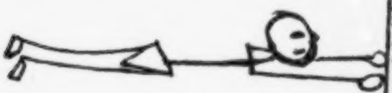
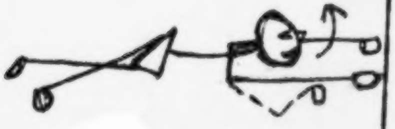
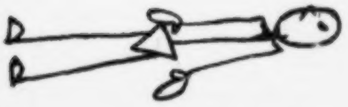
1. I look up. 1-5	Remind Melody to center head.
2. I put my arms down by my side. 1-5.	Get Tim to grab for maintenance, Lori to put hands under butt, heads in middle.
3. My legs are straight. 1-5	
4. I lie straight.	Poem
5. I stretch my arms above my head. 1-5	Encourage straight legs and keeping left arm straight.
6. I roll left. 1-5	Facilitate head jerk toward left arm, put hands between legs of children who cross their legs.
7. My arms are straight. 1-5	
8. My legs are straight. 1-5	
9. I look for my name. 1-5	Encourage maintenance of straight body.
10. I roll left. 1-5	Facilitate head jerk to left arm.
11. Repeat number 2.	
12. I slide my left foot up. 1-5	With feet flat on plinth. To those with abduction say, "Knees straight up," and facilitate. Keep other leg straight.
13. Left foot flat. 1-5	Keep other leg straight.
14. And down.	Watch that no one crosses legs.
15. I slide my right foot up. 1-5	Facilitate as in 12.
16. Right foot flat.	
17. And down.	Facilitate as in 14.
18. I slide both feet up.	Facilitate as in 12.
19. I pull my knees apart. 1-5	Facilitate flat feet at ankle only.
20. Knees together. 1-5	
21. Repeat 19.	
22. My legs are straight. 1-5	Watch that legs don't cross. Song here.
23. I stretch my arms above my head. 1-5	Facilitate and remind as in 3. Keep right arm straight.
24. I roll right. 1-5	Same as 6.
25. My legs are straight. 1-5	

26. Look at the chair.	
27. I grab the chair. 1-5	If needed, intend, (I pull down to the chair).
28. My arms are straight. 1-5	
29. My head is up. Up-up-up-up.	Say a sound.
30. My legs are straight. 1-5	Facilitate hands, head, arms, legs where needed.
31. I let go.	All heads in the middle.
32. I push off. 1-5	Hands used, not legs. Pull all but Ted, LuAnn and Jeff down so that insteps are resting on edge of plinth.
33. My feet are flat.	Facilitate as needed.
34. I stand up. 1-5	
35. My arms are straight. 1-5	"On the plinth"
36. I sit down. 1-5	

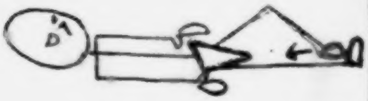
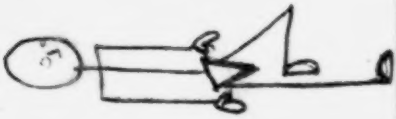
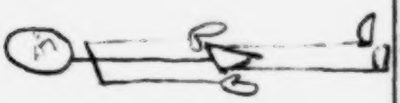
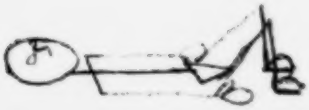
DOCUMENTATION CHART (P3)

INTENTION	VERBAL INSTRUCTIONS	DESCRIPTION
1. I look up. 1-5 	"Look up at the ceiling and keep your head in the middle."	Place head in the midline and focus eyes on ceiling directly above.
I put my arms down by my side. 1-5 	"Keep your head in the middle.""Grab the plinth to help your arms stay down."	Extend arms and place hands (palmar surface down) on plinths.
My legs are straight. 1-5 	"Point your toes to the ceiling and straighten your legs, making sure they don't cross." "Keep your head in the middle and your arms down while you stretch."	Extend knees maximally, keeping feet dorsiflexed.
I lie straight. 1-5 	"Do all three (1,2,3) to get nice and straight." Poem or song to maintain position above.	Extend knees maximally, keeping feet dorsiflexed.
2. I stretch my arms above my head. 1-5 	"Stretch your arms above your head while you keep your head in the middle.""Your legs should stay straight."	Extend elbows maximally, above head.
3. I roll left. 1-5 	"Put your head on your arm and keep your arms straight above your head while you roll.""Stay on your own plinth.""Keep your legs straight without crossing."	Roll from supine to prone in a segmental pattern.

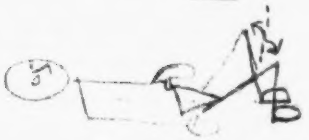
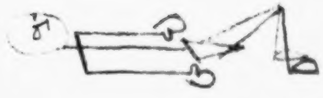
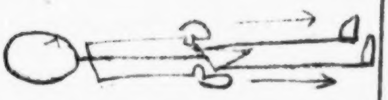
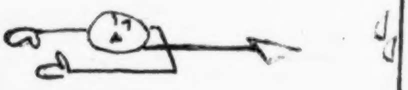
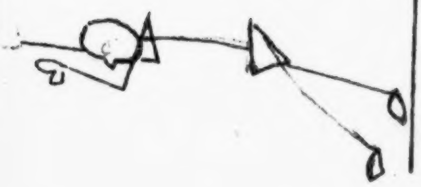
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches conscious inhibition of ATNR. Promotes head control and body symmetry.	Sitting, standing.	
Teaches conscious inhibition of Moro pattern and ATNR. Improves body symmetry and grasp.	Sitting, standing. Pulling up pants in dressing.	
Promotes body symmetry. Prepares for weight-bearing.	Standing.	
Promotes body symmetry. Prepares for weight-bearing.	Standing.	
Teaches conscious inhibition of arm flexion pattern and labyrinthine reflex. Prepares for rolling.	Putting shirt over head in dressing.	
Promotes segmental rolling and head control. Promotes spatial awareness.	Change of place from supine to prone for pushing off the plinth.	

INTENTION	VERBAL INSTRUCTIONS	DESCRIPTION
4. My arms are straight. 1-5 	"Your arms should still be above your head from rolling. "Keep your head in middle." "Keep your legs straight."	Extend elbows maximally forward, with shoulder girdle protracted.
My legs are straight. 1-5 	"Keep your arms straight and straighten your legs." "Your stomachs should be flat on the plinths."	Extend knees and hips maximally.
I look for my name. Up 	"Keep your arms and legs straight when you look up.""Head in the middle; keep your stomach on the plinth."	Lift head in midline while rest of body remains extended.
5. I roll left. 1-5 	"Put your head on your left arm.""Keep your arms and legs straight while your roll left.""Stay on your own plinth."	Roll from prone to supine, in a segmental pattern.
6. I put my arms down by my side. 1-5 	"Keep your head in the middle.""Grab the plinth to help you keep your arms down.""Your legs should still be straight."	Extend arms and place hands (palmar surface down) on plinths.

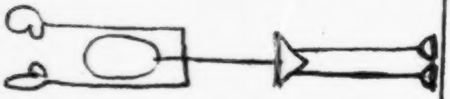
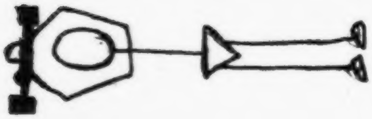
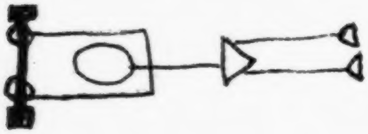
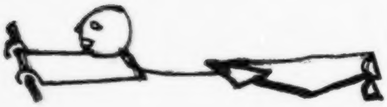
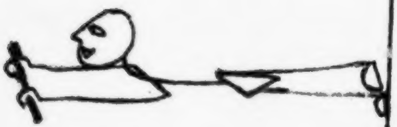
RATIONALE FOR GROUP	FUNCTIONAL APPLICATION	ADAPTATIONS -- INTENTION FOR INDIVIDUALS
Teaches conscious inhibition total flexion pattern in prone.	Sitting, standing.	
Teaches conscious inhibition of total flexion pattern in prone. Stretches hip flexion contractures.	Standing.	
Teaches conscious inhibition of total flexion pattern in prone and STNR. Promotes head control.	Head control in sitting and standing.	
Promotes segmental rolling and head control. Promotes spatial awareness.	Change of place from prone to supine.	
Teaches conscious inhibition of Moro flexion pattern and ATNR. Improves body symmetry and grasp.	Sitting, standing. Pulling up pants.	

INTENTION	VERBAL INSTRUCTION	DESCRIPTION
7. I slide my left foot up. 1-5 	"Keep your right leg straight while you slide your left foot up.""Keep your heel down as you slide." "Your arms should stay down and your head in the middle."	Flex left hip and knee as foot remains dorsiflexed and entire plantar surface remains on plinth.
Left foot flat. 1-5 	"Keep your right leg straight with toes pointing to the ceiling.""Your left knee should also be pointing straight up."	Place plantar surface of left foot flat on plinth, with knee adducted to midline position.
And down. 	"Slide your left foot down keeping it on the plinth.""Both legs should be straight, and your head in the middle."	Slide plantar surface of left foot down plinth until knee is maximally extended, keeping knee in midline position.
8. I slide my right foot up. 1-5 Right foot flat. 1-5 And down	Same as number 7, except right and left reversed.	Left and right reversed on above.
9. I slide both feet up. 1-5 	"Slide both feet up while keeping them on the plinth. "Keep your arms down and your head in the middle.""Your feet should be flat and knees pointing up."	Flex both hips and knees keeping plantar surface of both feet on plinth.

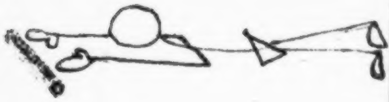
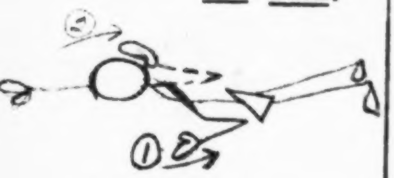
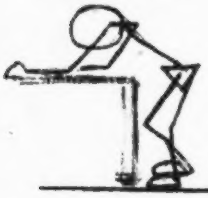
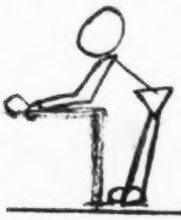
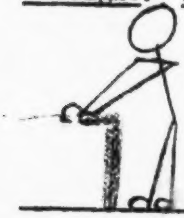
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches conscious inhibition of ATNR and crossed extension reflex. Promotes dorsiflexion of ankles. Promotes spatial awareness.	Alternate weightbearing for stepping.	
Teaches conscious inhibition of extensor thrust and flexor withdrawal. Promotes weightbearing.	Standing.	
Teaches conscious inhibition of ATNR, crossed extension and flexor withdrawal reflexes.	Alternate weightbearing for stepping.	
Teaches conscious inhibition of ATNR, flexor withdrawal and extensor thrust. Promotes dorsiflexion of ankles.	Sitting.	

INTENTION	VERBAL INSTRUCTION	DESCRIPTION
I pull my knees apart. 1-5 	"Keep your feet flat while knees are apart." "Arms down and head in the middle."	Abduct and outwardly rotate legs while knees, hips and ankles remain flexed.
Knees together 1-5 	"Keep your feet flat, arms down and heads in the middle." "Keep your knees pointing straight upwards." "Your knees may touch."	Adduct and inwardly rotate legs while knees, hips, and ankles remain flexed and plantar surface of feet remains on plinth.
My legs are straight. 1-5 	"Slide your feet down the plinth." "Keep arms down and your head in the middle."	Slide plantar surfaces of both feet down plinth until knees are maximally extended and ankles are dorsiflexed.
10. I stretch my arms above my head. 1-5 	"Keep your head in the middle and your legs straight while you stretch."	Extend elbows maximally and stretch arms above head.
11. I roll right. 1-5 	"Put your head on your right arm." "Keep your arms and legs straight while you roll right." "Stay on your own plinth."	Roll from supine to prone in segmental pattern.

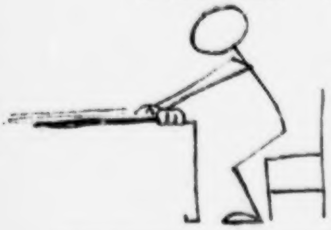
RATIONACE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTIONS OF INTENTION FOR INDIVIDUALS
Teaches voluntary outward rotation and abduction of legs.	Standing. Sitting. Balance.	
Teaches voluntary inward rotation and adduction of legs.	Sitting. Standing.	
Teaches conscious inhibition of ATNR, crossed extension and flexor withdrawal.	Sitting. Standing.	
Teaches conscious inhibition of arm flexion (Moro) and labyrinthine patterns. Prepares for rolling.	Putting shirt over head in dressing.	
Promotes segmental rolling and head control. Promotes spatial awareness.	Change of place from supine to prone for pushing off the plinth.	

INTENTION	VERBAL INSTRUCTION	DESCRIPTION
12. My legs are straight. 1-5 	"Your arms should be straight from rolling." "Keep your stomach on the plinth."	Extend knees and hips maximally.
13. I grab the chair. 1-5 	"Look at the rung and grab it with both hands." "Stay flat on your stomach with legs nice and straight and your head in the middle."	Grasp chair rung with both hands.
My arms are straight. 1-5 	"Head in the middle and stretch your elbows until they are straight." "Stomachs flat."	Extend elbows maximally while maintaining grasp.
My head is up. 1-5 	"Lift head up in the middle.""Keep your stomach flat and your legs straight."	Lift head while arms are extended and hands grasping chair rung.
My legs are straight. 1-5 	Stay nice and straight with your stomachs flat."	Extend knees and hips maximally in prone position.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches conscious inhibition of total flexion pattern in prone. Stretches hip flexion contractures.	Standing.	
Teaches symmetrical movement of hand and arm to target on rung. Promotes grasp and eye-hand coordination.	Grasp of any object. Standing.	
Teaches conscious inhibition of total flexion in prone. Prepares for weight-bearing on hands and arms.	Grasp of any object. Standing.	
Teaches conscious inhibition of STNR and tonic labyrinthine. Promotes head control.	Grasp of chair rung while sitting or standing.	
Teaches conscious inhibition of STNR and Moro flexion patterns.	Standing.	

INTENTION	VERBAL INSTRUCTION	DESCRIPTION
I let go. 1-5 	"Look at your hands while you let go. "Keep your elbows and legs straight."	Extend fingers and abduct thumbs to release chair rung.
14. I push off. 1-2 Push. 	"Slide one hand to your chest (1) then the other hand to your chest (2), now push back.""Keep your stomach flat, legs straight, and head in the middle.	While maintaining grasp on plinth, alternately slide one hand to shoulder level, then other, and simultaneously extend elbows.
15. My feet are flat. 1-5 	"Bend your knees." "Put your heels down.""Keep grabbing the plinth."	Flex knees to slide foot up until entire plantar surface rests on floor.
I stand up. 1-5 	"Keep grabbing.""Head up." "Don't rest against the plinth.""Keep heels down and knees straight."	Extend elbows and raise head to bear weight on both arms and legs in supported standing position.
My elbows are straight. 1-5 	"Keep grabbing.""Raise your head."	Maximally extend elbows while maintaining grasp.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTERTION FOR INDIVIDUALS
Teaches ability to use hands and arms while keeping lower body stationary and symmetrical. Promotes grasp and release.	Grasp and release of any object.	
Teaches conscious inhibition of STNR. Teaches asymmetrical flexion of elbows and symmetrical extension. Promotes weightbearing on hands, grasp, lower body symmetry.	Change of place by pushing off.	
Teaches dorsiflexion of ankle, knee flexion, weightbearing on hands and arms. Breaks up crossed extension and extensor thrust.	Standing. Sitting.	
Teaches weightbearing on arms and legs, extension of elbows and knees. Breaks up extensor thrust and crossed extension patterns.	Standing. Walking.	
Teaches head contol, weightbearing on hands and arms. Promotes functional grasp.	Standing. Grasp of any object.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
I sit down. 1-5 	"Sit down slowly while you keep grabbing." "Keep your feet on the floor."	Flex hips and knees to sit down on potty or chair while grasp on plinth controls the movement.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches controlled hip flexion while maintaining protracted shoulder girdle and grasp in midline. Breaks up extensor thrust and ATNR.	Sitting down. Grasp.	

Plinth Series (P4)

The fourth Plinth Series emphasizes movements carried out in prone lying. Weightbearing on the hands and arms, head control and alternate symmetrical extension and flexion of the elbows are the primary goals presented during the major portion of the series. These movements, which are stressed separately, are then applied as a unit both in coming up into the W-sit ("I sit back,") and in pushing off.

The last part of the series focuses on a return to supine lying and movements designed to promote improved weight-bearing, lifting of the legs and stepping. These movements follow a more complex pattern than the similar ones introduced in the preceding Plinth Series (P3).

The children's plinths are placed side by side in two rows with an aisle between. The ladderback chairs (used for grasp in both supine and prone) are placed flanking the aisle with the back of a chair against the head of each plinth. This arrangement allows the teacher-therapist a great deal of mobility in reaching the children for facilitation. The five plinths in each row are separated from one another by a space of three to four inches.

PLINTH SERIES - November 5, 1971
(Revised from 9/71)

Hotpacking done before plinths begin. Passive and active movement done to joint.
Linda - elbows
Lloyd - knees
Mel - hips
Tim - hips

Plinths arranged with spacing the width of a slat between them. Ladderbacks placed at head end of plinth.

1. I stretch my legs. 1-5.	Arms down at sides. Head in middle. Feet dorsiflexed. Mel - when arms are at sides, palms should always be down on plinth. Lori - after getting arms down hands are put in pants for maintenance.
2. I stretch my arms. 1-5.	Arms stretched above head. Lloyd - shoulder girdle should be protracted. Linda - elbows should be rather close together.
3. I grab the chair. 1-5.	Heads should be in the middle while grabbing with preferred hand. Lloyd - legs should remain straight. Mel - right knee abducted and she should maintain straight legs. Legs should remain still while grabbing. Special attention to keep head in middle. Lori - head in middle.
4. I grab. 1-5.	Grab chair with other hand. Head should be in middle and legs straight.
5. I stretch my elbows. 1-5.	Elbows and legs straight. Nancy - elbows should be straight while grabbing and remain still when squeezing.
6. Squeeze. Open.	Thumbs should be outside of fist while squeezing. Elbows remain straight. After releasing, arms should remain straight above head.

7. I roll right. 1-5.	Goal is to roll keeping arms and legs straight. Telling them to place head on arm aids rolling. Care should be given so they roll on own plinth. Mel - keeps arms straight by self but needs a little help to abduct right leg to roll right. Lori - left hand grabs chair to maintain prone position. LuAnn - holds stick with straight elbows while rolling.
8. I stretch my legs. 1-5.	Goal is stomach flat. Arms should still be extended from rolling.
9. I grab the chair. 1-5. POEM	Grab rung of chair with both hands. Head should be in middle looking at rung while arms and legs are straight. Mel - lower body straight and still. Tim, Doreen and Lloyd - stomachs should be flat and legs straight.
10. I grab higher. Up. I grab higher. Up. I grab lower. Down. I grab lower. Down.	Others keep grabbing while Ted, Tim, LuAnn, Linda and Jeff grab higher. Left first, then right. Elbows straight while grabbing. Left hand grabs lower while other hand keeps grabbing. Same with right.
I let go. 1-5.	Elbows and legs remain straight, stomachs flat. Nancy - should stay on stomach after letting go.
11. My hands are flat. 1-5.	Thumbs outside of fist and grabbing plinths, arms stretched above head.
12. I slide my hands to me. 1-5.	Simultaneously slide hands to chest Elbows close to side, Thumbs should be opposite fingers while grabbing.
13. I push up. Up. Up. And down. Repeat	Hands should be grabbing. Heads lifted in the middle. Stomach must remain flat.

14. I sit back. 1-5.	Sit back between heels in the W sit. Hands should always be grabbing. Knees pulled up to stomach. Sitting back should be slow and controlled. Special attention to ankles so they are dorsiflexed. Doreen, Nancy and Lori have chairs. Care should be given so chest isn't completely resting on chair. They should lift arms onto chair only after they have straightened arms while grabbing plinth. Nancy - attention to dorsiflexion of ankles. Mel and Linda - simultaneously bring knees under hips. Encourage Mel to maintain W sit by self. Linda grabs facilitator's ankles to lift her upper trunk. Ted - knees should be close together while sitting. Doreen and Lloyd - help needed at arms and legs when going down and getting straight.
My elbows are straight. 1-5.	Hands grabbing - heads up in the middle.
SONG	
I go down. 1-5.	Hands should "walk" down plinth. Knees should be weighted properly and directly under hips.
15. I lie straight. 1-5.	Stomach flat. Arms above head, legs straight.
16. I roll right. 1-5.	Goal is to roll keeping arms and legs straight. Telling them to place head on arm aids rolling. Care should be given so they roll on own plinth.
17. Arms down. 1-5.	Arms by side. Grabbing plinth aids maintenance. Head in middle. Ted - given a stick for right hand to grab. This aids keeping arms by side. Nancy - minimal help to lift wrist.

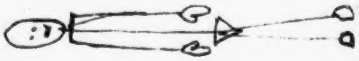
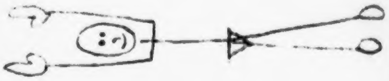
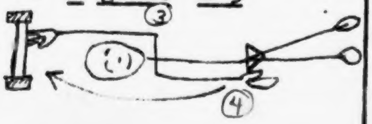
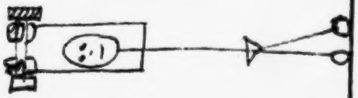
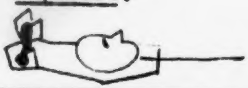
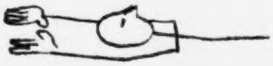
18. My legs are straight. 1-5.	
19. I cross. 1-5.	Left ankle over right ankle. Legs straight and arms stay down.
Apart.	
I cross. 1-5.	Right over left ankle.
Apart.	Mel - rolls to right side to cross right ankle over left. Linda - rolls to side for crossing.
20. To my knee. 1-5.	Slide left heel up plinth then lift to right knee. Head in middle, arms down and right leg straight.
And straight.	
To my knee. 1-5.	Same, only with right heel.
And straight.	Nancy - when she is doing it by self, she does it on her side.
21. I stretch my arms. 1-5.	
I roll left. 1-5.	
My legs are straight. 1-5.	Ankles should be at edge of plinth for dorsiflexion.
22. I grab the plinth. 1-5.	Arms above heads. Thumb opposite fingers, grabbing slat.
I push off. To me and Push.	Stomachs stay flat on plinth. Simultaneously slide hands to chairs and push until arms are straight. Goals - use of hands while grabbing, keeping legs straight and stomach flat.
23. My feet are flat. 1-5. I stand up. 1-5. My elbows are straight. 1-5.	Hands grabbing plinth while standing. Head in middle. Hips should not be resting against plinth. Heels down.
I sit down. 1-5.	Slow controlled hip flexion - maintain grasp.

LuAnn - stands with arms extended and hands clasped.

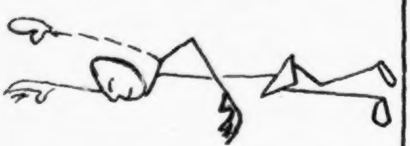
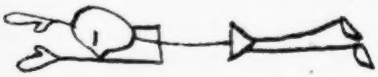
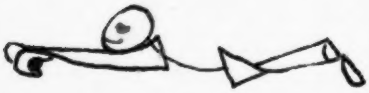
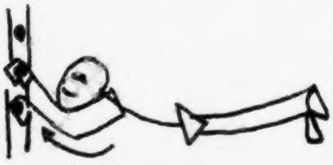
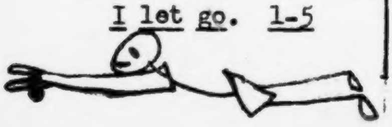
Mel - stands in shoes.

Tim - goal is to sit down by self. After getting feet flat, Tim should need only environmental support.

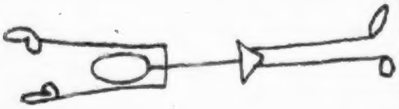
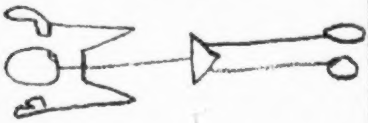
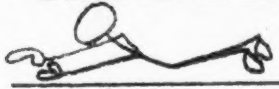
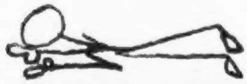
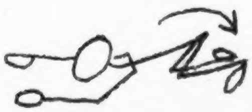
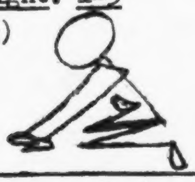
DOCUMENTATION CHART (P4)

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
1. I stretch my legs. 1-5 	"Keep your head in the middle, looking up, while you stretch." "Make sure your arms are down by your sides." "Point your toes to the ceiling and keep your knees close together, but not touching."	Extend knees maximally with head in midline, arms down, palms on plinth, feet dorsiflexed.
2. I stretch my arms. 1-5 	"Stretch your arms above your head while you keep your head in the middle." "Your legs should stay straight and still." "Don't roll onto your side."	Extend elbows maximally. Retract shoulder girdle. Hands should be directly above shoulders.
3. I grab the chair. 1-5 4. I grab. 1-5 	"Grab the chair one hand at a time.""Keep your elbows straight and your head in the middle." Don't look at the chair, or your head won't be in the middle." "Keep your legs straight."	Grasp chair, one hand at a time.
5. I stretch my elbows. 1-5 	"Keep grabbing while you stretch." "Keep your legs straight."	Extend elbows maximally, while maintaining grasp.
6. Squeeze. 	"Squeeze the rung tightly and then let go, keeping your elbows straight."	Tighten grasp.
Open. 		Release grasp of chair rung. Extend fingers.

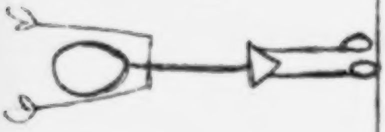
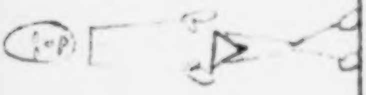
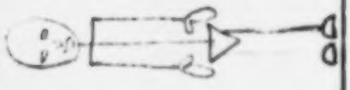
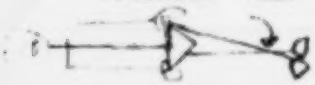
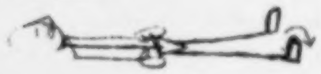
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes body symmetry. Prepares for weightbearing.	Standing.	LuAnn - feet must not touch. Ted - feet close together. Lori - after getting arms down, hands are put in pants for maintenance.
Prepares for rolling to prone. Teaches conscious inhibition of arm flexion pattern.	Putting shirt over head for dressing.	Linda - only extends partially because of contractures. Lloyd - legs held in extension while stretching.
Improves grasp and wrist rotation, targeting.	Grasping cup for drinking. Grasping chair rung for standing. Targeting for armholes of shirt.	
Teaches conscious inhibition of arm flexion pattern. Improves grasp.	Putting shirt over head while holding it.	
Improves strength of grasp. Prepares for release. Promotes release. Teaches conscious inhibition of arm flexion pattern.	Stronger grasp on spoon, chair rung, etc. Release of spoon into bowl. Release of cup on table.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
7. I roll right. 1-5 	"Keep your arms straight above your head while you roll." "Don't bend your legs." "Place head on straight arm." "Stay on your own plinth."	Roll right, from supine to prone.
8. I stretch my legs. 1-5 	"Keep your arms up with straight elbows and your head in the middle." "Stretch out nice and straight."	Extend knees maximally.
9. I grab the chair. (poem) 1-5 	"Grab with both hands at once." "Look at the rung while you are grabbing." "Stay flat on your tummy with your legs straight while you are grabbing."	Target hands to grasp rung of chair while lower body remains extended.
10. I grab higher. up. up. 	"Those who can grab well may go higher." "Grab with the left hand first, and then we'll say it again for the right." "Look at the rung you're going to grab and keep your elbows nice and straight."	Grasp one rung higher while maintaining grasp with other hand.
I grab lower. down, down.	"Go back to the rung you started on." "Let's put one hand down at a time, the left first and then the right."	Return to original place, one hand at a time.
I let go. 1-5 	"Don't bend your elbows when you let go, just stretch your fingers and open your hands." "Keep your palms touching the rung."	Release rung of chair.

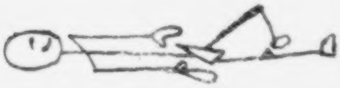
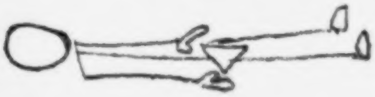
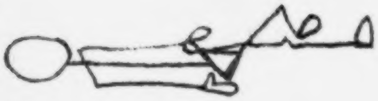
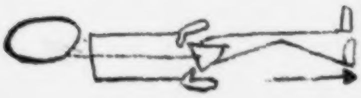
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes segmental rolling. Teaches conscious inhibition of total flexion pattern in prone. Promotes spatial awareness.	Change of place from supine to prone. Change of place by pushing off plinth.	LuAnn - Holds stick with straight elbows while rolling. Lori - Left hand grabs chair to maintain prone position.
Teaches conscious inhibition of total flexion in prone.	Standing.	
Teaches symmetrical hand movement, targeting. Improves grasp. Teaches conscious inhibition of prone flexion pattern.	Grasping cup. Grasping chair rung for standing.	Nancy - Help to maintain grasp after achievement. Lloyd - Lower body held symmetrically.
Teaches ability to use hands and arms while keeping lower body still and symmetrical. Promotes grasp and release, eye-hand coordination.	Hand washing. Reaching for objects. Eating, or any asymmetrical activity that requires grasp.	Lloyd, Doreen, Melody, Lori and Nancy do not go higher -- only maintain at original place.
Teaches ability to use hands and arms while keeping lower body still and symmetrical. Promotes grasp and release, eye-hand coordination.	Hand washing. Reaching for objects. Eating, or any asymmetrical activity that requires grasp.	Lloyd, Doreen, Melody, Lori, and Nancy maintain at original place.
Teaches ability to use hands and arms while keeping lower body still and symmetrical. Promotes grasp and release.	Any asymmetrical hand activity which requires release.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
11. My hands are flat. 1-5 	"Thumbs outside of fist while you grab the plinth." "We'll pull you down a little, so you can put your hands flat on the plinth." "Keep your arms up with your elbows straight."	Place entire palmar surfaces of both hands on the plinth. Lower body remains extended.
12. I slide my hands to me. To me. 	"Slide your open hands to your chest." "Bend both your arms at the same time, while your head stays in the middle." "Let's get ready to push up." "Elbows close to your body."	Flex elbows symmetrically with hands remaining open and on plinth.
13. I push up. Up,up.  And down. 	"Push up with your arms and lift your head." "Don't let your tummy come off the plinth, keep it flat." "Look right across the aisle and say hi to your neighbor." "Go back down again."	Symmetrically extend arms and lift head Symmetrically flex elbows.
14. I sit back. 1-5 	"Bring your legs up under your tummy and push up with your arms while you sit back between your heels." "Hold your head up nice and straight so you can look across at your neighbor." "Keep your hands flat on plinth or grabbing slats.""Point toes out."	From prone, push up into four point kneel, and then sit back between heels. Arms extended.
My elbows are straight. 1-5 (Song) 	"Head up." "Push up tall with straight elbows" "Keep grabbing the plinth."	Extension of arms and raising of head and upper trunk while lower trunk is in flexed position.
I go down. 1-5. Reverse of Figure 14, "I sit back."	"Slide your hands down the slats." "Stretch your legs and keep your tummy flat.'	Using the hands and arms slide the upper body forward. Knees weighted and directly under hips. Extend hips and legs back to prone lying.

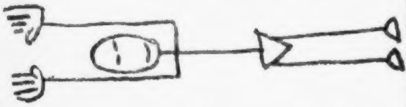
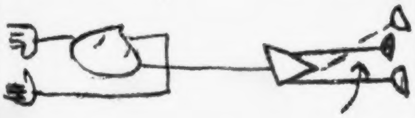
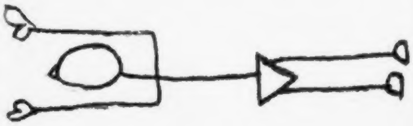
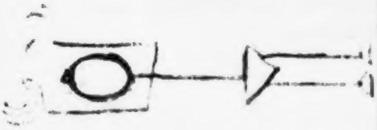
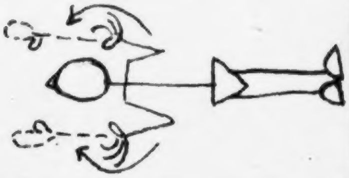
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes grasp and release. Teaches use of hands while maintaining symmetrical body position.	Pushing off plinth.	Some children may grasp plinth slats.
Prepares for weightbearing on hands and arms. Promotes body symmetry.	Pushing off plinth.	
Teaches head control, weight-bearing on arms. Teaches conscious inhibition of total flexion pattern.	Sitting.	
Teaches head control. Promotes body symmetry. Teaches conscious inhibition of total flexion pattern.	Pushing off.	
Teaches head control, weight-bearing on arms and legs, hip flexion. Promotes dorsi-flexion of ankle.	Sitting. Standing.	Nancy, Lori, Doreen, have chairs to support arms and upper trunk.
Teaches conscious inhibition of prone flexion. Promotes head control and weight-bearing on hands and arms, and dorsiflexion of ankles.	Sitting. Standing. Pushing off.	
Teaches conscious inhibition of prone flexion. Promotes head control and weight-bearing on hands and arms, and dorsiflexion of ankles.	Pulling on. Sitting. Standing.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
15. I lie straight. 1-5 	"Keep your tummy flat and knees straight.""Your arms should be above your head."	Maximally extend elbows, hips and knees. Protract shoulder girdle with head in middle.
16. I roll right. 1-5 See Figure 7	"Keep your arms and legs straight while you roll." "Put your head on arm before you roll."	Roll from prone to supine.
17. Arms down. 1-5 	"Put your palms down on the plinth.""Grab the slats if it helps you keep your arms down." "Head in the middle."	Place hands at sides, palms down and elbows extended.
18. My legs are straight. 1-5 	"Toes to the ceiling." "Keep your arms down and head in the middle."	Maximally extend knees with head in midline, arms down, palms on plinth, and feet dorsiflexed.
19. I cross. 1-5 	"Keep your legs straight while you cross.""Cross only at the ankle." "Uncross on the word apart."	Extend knees maximally and lift left leg to cross over right leg at ankle only.
Apart. 	"Uncross on the word apart."	Lift and abduct extended left leg and replace on plinth, keeping ankle dorsiflexed.

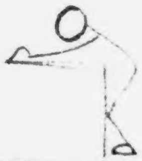
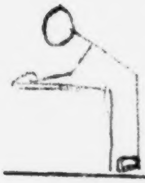
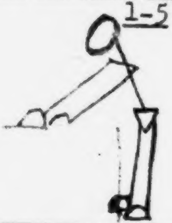
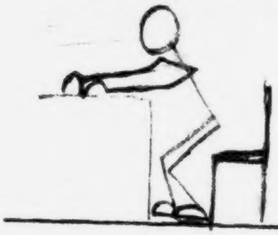
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches conscious inhibition of prone flexion pattern. Promotes body symmetry.	Standing. Pushing off.	
Promotes segmented rolling. Promotes head control.	Change of place from prone to supine. Pushing off.	
Teaches conscious inhibition of shoulder girdle retraction and arm flexion pattern in supine. Promotes upper trunk symmetry and inward rotation of forearm.	Standing. Sitting. Pulling shirt over head in dressing.	Ted - holds stick in right hand to aid maintenance. Lori - hands held down throughout.
Promotes body symmetry. Prepares for weightbearing.	Standing.	
Teaches lifting and adduction of one leg independently of the other while upper trunk symmetry is maintained.	Stepping.	Melody - rolls to right side to cross right ankle over left. Linda - roll to side for independent crossing.
Teaches lifting and abduction of one leg independently of the other while upper trunk symmetry is maintained. Teaches conscious inhibition of crossed extension pattern.	Stepping.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
I cross. 1-5. See Figure 19	"Keep your legs straight while you cross." "Cross only at the ankle."	Extend knees maximally and lift right leg to cross over left leg at ankle only.
Apart. As in 19.	"Uncross on the word apart."	Lift and abduct extended right leg and replace on plinth, keeping ankle dorsiflexed.
20. To my knee. 1-5 	"Keep your head in the middle and arms down at your sides." "Keep your left foot flat as you slide it up the plinth." "Touch your left heel to your right knee." "Keep your right leg straight."	Flex left leg to slide flat foot up plinth to level of right knee. Lift left foot and place heel on right knee.
And straight. 	"Keep your head in the middle and arms down at your sides, while you slide your foot down the plinth."	Replace left heel on plinth, keeping ankle dorsiflexed, and extend left knee.
To my knee. 1-5 	"Keep your head in the middle and arms down at your sides." "Keep your right foot flat as you slide it up the plinth." "Touch your right heel to your left knee." "Keep your left leg straight."	Flex right leg to slide flat foot up plinth to level of left knee. Lift right foot and place heel on left knee.
And straight. 	"Keep your head in the middle and arms down at your sides while you slide your foot down the plinth."	Replace right heel on plinth, keeping ankle dorsiflexed and extend right knee.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Same as 19.		
Same as 19.	Stepping.	
Teaches bending of one leg independently of the other while upper trunk symmetry is maintained. Teaches conscious inhibition of ATNR and crossed extension and flexor withdrawal patterns. Promotes targeting.	Stepping. Putting on shoes or pants.	Nancy rolls on side for independent targeting and maintenance.
Teaches extention of one leg independently of the other while upper trunk symmetry is maintained. Teaches conscious inhibition of ATNR and crossed extension and flexor withdrawal patterns.	Stepping. Putting on shoes or pants.	
Teaches bending of one leg independently of the other while upper trunk symmetry is maintained. Teaches conscious inhibition of ATNR and crossed extension and flexor withdrawal patterns. Promotes targeting.	Stepping. Putting on shoes or pants.	Nancy rolls on side for independent targeting and maintenance.
Teaches extension of one leg independently of the other while upper trunk symmetry is maintained. Teaches conscious inhibition of ATNR and crossed extension and flexor withdrawal patterns. Promotes targeting.	Stepping. Putting on shoes or pants.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
21. I stretch my arms. 1-5. 	"Stretch your arms above your head while you keep your head in the middle." "Your legs should stay straight and still." "Don't roll onto your side."	Extend elbows maximally. Retract shoulder girdle. Hands should be directly above shoulders.
I roll left. 1-5 	"Put head on left arm and roll." "Keep your arms above your head and legs straight while you roll." "Stay on your own plinth."	Roll left from supine to prone.
My legs are straight. 1-5 	"We will pull you down, so you can feel your ankles at the end of the plinth." "Point your toes down." "Stretch your legs and keep your stomach flat."	Extend knees maximally with head in midline, palms on plinth, feet dorsiflexed.
22. I grab the plinth 1-5 	"Make sure thumbs are on one side of the slat, fingers on the other." "Keep your arms straight."	Extend fingers and abduct thumb to grasp plinth slat.
I push off. To me. And push. 	"Slide both hands to your chest." "Head and shoulders up as you push back." "Keep your stomach flat and legs straight."	While maintaining grasp of plinth, flex both elbows and slide hands to chest level, then extend both elbows to propel backward until feet touch the floor.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTIO FOR INDIVIDUALS
Prepares for rolling to prone. Breaks up arm flexion pattern.	Putting shirt over head in dressing.	Linda - only extends partially because of contractures. Lloyd - legs held in extension while stretching.
Teaches segmental rolling with arms and legs extended. Breaks up flexion pattern in prone.	Change of place by rolling from supine to prone.	
Promotes body symmetry. Prepares for weightbearing.	Standing.	
Teaches grasp and inhibition of total flexion in prone.	Grasp of any object. Standing.	
Teaches alternate symmetrical flexion and extension of elbows and weightbearing while maintaining grasp. Maintains lower body symmetry. Teaches independent change of place. Teaches conscious inhibition of ATNR and flexion pattern.	Change of place by pushing off.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
23. My feet are flat. 1-5 	"Put your heels down." "Keep grabbing the plinth."	Flex knees to slide foot up until entire plantar surface rests on floor.
I stand up. 1-5 	"Keep grabbing.""Head up, don't rest against the plinth.""Keep hands down and knees straight."	Extend elbows and raise head to bear weight on both arms and legs to support a standing position.
My elbows are straight. 1-5 	"Keep grabbing." "Head in the middle." "Stand tall."	Maximally extend elbows while maintaining grasp to support a standing position.
I sit down. 1-5 	"Sit down slowly while you keep grabbing.""Keep your feet flat on the floor."	Flex hips and knees to sit down while grasp on plinth controls balance.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches dorsiflexion of ankle and weightbearing on hands and arms. Teaches conscious inhibition of crossed extension and extensor thrust.	Standing. Sitting.	Doreen - stands on one foot while other is flexed up to her bottom. Same done on other leg. Then she stands on both. This equalizes her weightbearing and leg extension.
Teaches weightbearing on arms and legs, and head control. Teaches conscious inhibition of extensor thrust and crossed extension patterns.	Standing. Walking.	
Teaches head control and weightbearing on hands and arms. Promotes functional grasp.	Standing. Grasp of any object.	
Teaches controlled hip flexion while maintaining protracted shoulder girdle and grasp. Promotes head control.	Grasp. Change of place to sit down.	LuAnn - extends clasped hands in front of her.

Standing and Walking Class: General Description and Rationale (S)

The Standing and Walking Class skills depend on movements learned in the other two activities. The Plinth Series teaches movements such as knee extension, ankle dorsiflexion, hip flexion and grasp-release (See Section P). The Hand Class teaches movements needed in sitting, such as balance with weight forward, head control and weight bearing on legs and feet (See H sections). The child can more readily learn the movements necessary for standing, e.g., weight bearing on the hands and feet or voluntary grasp and release when he is in a lying position (Plinths) or a sitting position (Hand Class), since these two positions offer greater stability of the trunk than does standing.

The position that the child is able to assume most independently and in the most normal-appearing manner becomes the basis for his individual standing or walking task. It is from a stable sitting position that the child is able to solve the task of standing up from a sitting position, holding the standing position and then sitting down. For example, perhaps the child's most independent stable sitting posture is at a table. In Standing and Walking Class he would then sit at a table to carry out those motor tasks that would improve his sitting skills. Sometime during the class he would spend some time sitting independently with the support of a chair, and then stand up using the chair as a support.

Total Body Orientation

In Standing and Walking, as in Plinth Series and the Hand Class, the whole body of the child is attended to in every movement.

Movement Variations

The tasks involved in Standing and Walking Class are carried out in a number of different positions. The conditions depend on the level of the child's ability. The following are some examples of variations:

1. A child may lie on the plinth and work on the movements necessary for standing, e.g., grasp, weightbearing on feet, knee extension, pushing off plinth and standing at the end of the plinth (See S3).

2. A child may be seated at a table. The table is used to facilitate stable sitting, which is needed before standing up. The child stands up using the slats of the table or the rungs of a ladderback chair. (See S5).

3. A child may sit on a chair and grasp the rungs of two chairs placed at his sides or one chair placed in front. Chairs are used to support stable sitting, to aid in coming to a stand and maintaining the stand. The child may or may not need the assistance of a teacher-therapist to stand up and maintain the stand. (See S5).

4. A child may sit freely without support but may need the support of a chair on either side to rise to a stand. He releases his grasp of the chair either with one or both hands to increase the amount of weight borne on the feet for balance and to decrease the reliance on the support. (See S5).

5. A child may sit freely and rise without support. After coming to a stand independently, he steps pushing one chair in front or two at the sides. (See S5).

6. A child may step using canes, knee splints, or sticks for support (See Description of Special Devices in the Introduction).

7. A child may step without support. Independent free walking can include many tasks, e.g., squatting down, clapping, alternately touching one heel to the opposite knee, stepping up on a stairway or stepping up between the rungs of a ladderback.

Range of Abilities

Within any given group there are varying levels of ability. Therefore, it is necessary to modify each task to allow each child to be included in the Standing and Walking Class, functioning at his maximum ability level.

Furthermore, individual children differ from one another in locus as well as level of dysfunction. Thus, while the whole body is involved in a movement, one aspect may be the focus of attention for an individual child. During the complex movements involved in standing up and sitting down each child is aware of the part of that task that is the most necessary aspect for him. For example, one child may need to develop grasp and release skills while another may concentrate on leg extension. They both operate within the same group and repeat the same intentions. The focus for each, however, is different. Since the child is aware of the point of his concentration he is challenged to improve in that area and thus, attention to the task is at a maximum. The part of the task emphasized is aimed at moving the child toward a more normal standing and walking posture.

Task Modifications

Throughout Standing and Walking Class the tasks can be modified by using different equipment, varying the number of facilitators, varying the number of times the child stands, or varying the movements carried out in a standing position. For the intention, "I grab. 1-5", the child at the table might grasp the slats to stabilize his sitting while the child who is free sitting could grasp the chair in front of him to develop arm extension and head control. The free sitter could clasp hands with interdigitated fingers in the midline to position weight forward and improve foot placement. Thus, each child is responding to the intention in the way which will aid him the most in coming to a stand from a sit.

Applications

Since opportunities to move about by standing and walking are presented throughout the day, Standing and Walking Class has many corresponding applications. One child, whose level of ability allows him to stand alone using support, may apply his learned standing skills by standing up to answer a question in school. The child who is able to walk moves himself from one activity to another. This child may use walking to go to his place at the table for meals and in passing out bibs to the others. Every child wants to move independently and it is considered a privilege to perform special chores to help one's peers.

Perceptual Awareness

Standing and walking not only gives the child a sense of independent movement, but also revises his perception of his own body image in relation to the room and the objects in it. In other words, the vertical position achieved in standing allows the child to assume that position which offers the most advantage for vision and personal contact. He observes "normal" people standing and moving about in a vertical position and thus, sees this posture as a most advantageous one to achieve. His own body image changes as he experiences standing and moving vertically.

Sitting and Standing Series (S1)

The following series was designed to prepare each child for independent sitting with the support of a ladderback chair in front of him. The eventual goal of sitting while grasping a support is to rise from a sit to a stand and to stand by himself by grasping the support.

The movements in this series are designed to promote voluntary functional grasp, weightbearing on the hands and arms, weightbearing on the legs and feet, hip, knee and ankle flexion and some independent asymmetrical arm movement while sitting.

The individual children range broadly in the amount of facilitation required to perform these tasks, from almost no facilitation to almost constant facilitation.

ROOM COPY

Sitting and Standing Series

February, 1971.

All children with ladderback chairs (sandbagged) in front.
Chairs arranged in semi-circle on rug.
All straps removed.
One facilitator for Nancy, one for Mark, one for Doreen, one for Melody and Lori together.

1. I grab the chair. 1-5.
   (Repeat for other hand.)
2. My feet are flat. 1-5.
3. My wrists are down. 1-5.
4. My elbows are down. 1-5.
5. I grab lower. 1-5.
   (Repeat for other hand if necessary)
6. My elbows are straight. 1-5. Heads up.
7. I grab higher. 1-5. Back to original place. Song if desired.
   (Repeat if necessary)
8. My feet are flat. 1-5.
9. I grab higher. 1-5.
10. My elbows are straight. 1-5.
11. I grab lower. 1-5. Back to original place.
12. My feet are flat. 1-5.
13. I stretch my right arm up. 1-5. Elbows straight.
14. I grab the chair. 1-5. If necessary.
    (same with left hand.)
15. My feet are flat. 1-5.
16. I stand up. 1-5.
17. I sit down. 1-5. Slowly, for those who can.

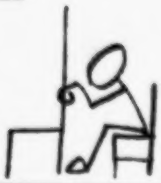
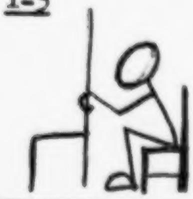
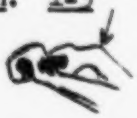
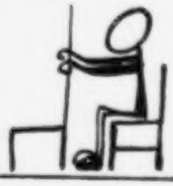
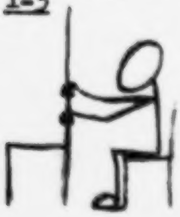
18. I let go. 1-5.

Putting hands on chair corners.

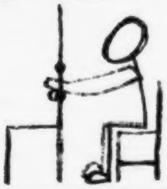
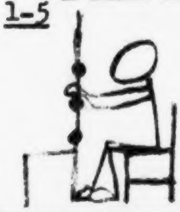
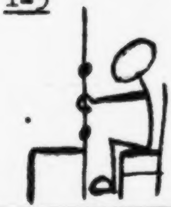
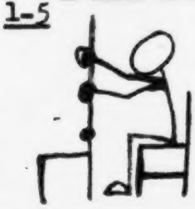
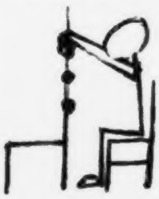
19. I grab the corners of my own chair. 1-5.

20. I sit straight. 1-5.

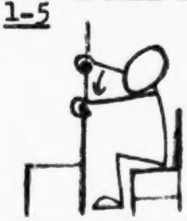
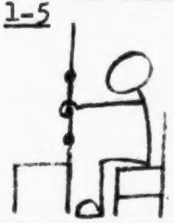
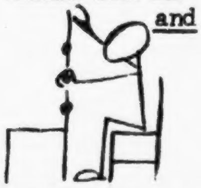
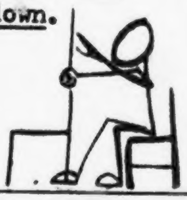
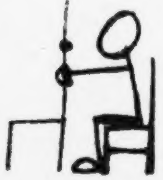
DOCUMENTATION CHART (S1)

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
1. I grab the chair. 1-5 	"Keep your wrists down." "Look at the rung as you grab." "Grab with one hand and then the other."	Extend elbows forward to grasp rung of chair by extending fingers and abducting thumb.
2. My feet are flat. 1-5 	"Put your heels down." "Keep your feet close to your chair." "Keep grabbing." "Keep your head up."	Place entire plantar surfaces of both feet on floor directly in front of chair and bring knee to approximately 90° angle.
3. My wrists are down. 1-5 	"Push the chair away." "Keep your feet flat and head up."	Extend wrists maximally to strengthen grasp.
4. My elbows are straight. 1-5 	"Keep your head up and in the middle." "Feet flat and close to your chair." "Sit up tall."	Extend elbows maximally while maintaining grasp to support upper trunk.
5. I grab lower. 1-5 	"Look at the rung you're going to grab." "Keep your elbow straight and wrists down." "Grab one hand at a time."	Release rung with one hand at a time and grasp one rung lower on chair back.

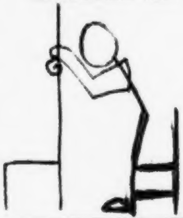
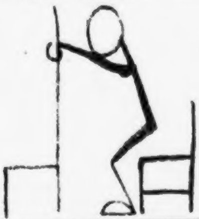
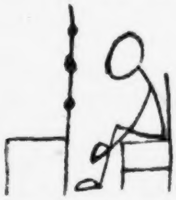
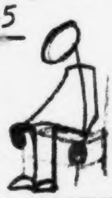
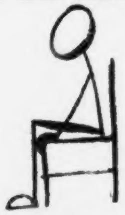
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Develops voluntary grasp. Promotes weight forward. Teaches conscious inhibition of arm flexion.	Drinking. Standing.	
Promotes ankle dorsiflexion for weight bearing on legs. Teaches conscious inhibition of extensor thrust.	Sitting. Standing.	
Promotes wrist extension for stronger grasp. Prepares for transfer of body weight to hands and arms for standing.	Grasp of any object. Drinking. Standing.	
Prepares for weight bearing on hands and arms while standing. Teaches conscious inhibition of arm flexion.	Standing. Sitting. Pushing off plinth.	
Teaches voluntary grasp and release, targeting and lifting of the arms. Promotes hip flexion, eye-hand coordination, break-up of ATNR.	Sitting. Release of any object.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
6. My elbows are straight. 1-5 	"Keep your head up and in the middle." "Feet flat and close to your chair." "Keep your wrists down." "Sit up tall."	Extend elbows maximally while maintaining grasp.
7. I grab higher. 1-5 	"Look at the rung while you are grabbing."	Release rung (by extending fingers) with one hand at a time and grasp original rung.
8. My feet are flat. 1-5 	"Put your heels down." "Keep your feet close to your chair." "Keep grabbing." "Keep your head up."	Place entire plantar surfaces on both feet on floor directly in front of chair and bring knee to approximately 90° angle.
9. I grab higher. 1-5 	"Go one rung higher." "Look at the rung you're going to grab." "Keep your elbow straight and wrists down." "Grab one hand at a time."	Release rung (by extending fingers) with one hand at a time and grasp (by flexing fingers with thumb abducted) one rung higher on chair back.
10. My elbows are straight. 1-5 	"Keep your head up and in the middle." "Feet flat and close to your chair." "Sit up tall."	Extend elbows maximally while maintaining grasp.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Prepares for weightbearing on hands and arms while standing. Teaches conscious inhibition of arm flexion.	Standing. Sitting. Pushing off plinth.	
Teaches voluntary grasp and release, targeting and lifting of the arms. Promotes hip flexion, eye-hand coordination and break-up of ATNR.	Sitting. Release of any object. Hand washing.	
Promotes ankle dorsiflexion for weightbearing on legs. Teaches conscious inhibition of extensor thrust.	Sitting. Standing.	
Teaching voluntary grasp and release, targeting, and lifting of the arms. Promotes hip flexion, eye-hand coordination.	Sitting. Grasp and release of any object. Hand washing.	
Prepares for weightbearing on hands and arms while standing. Teaches conscious inhibition of arm flexion.	Standing. Sitting. Pushing off plinth.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
11. I grab lower. 1-5 	"Go back to the rung you started on." "Look at the rung you're going to grab." "Keep your elbow straight and wrists down." "Grab one hand at a time."	Release rung (by extending fingers) with one hand at a time and grasp original rung.
12. My feet are flat. 1-5 	"Put your heels down." "Keep your feet close to your chair." "Keep grabbing." "Keep your head up."	Place entire plantar surfaces of both feet on floor directly in front of chair and bring knee to approximately 90° angle.
13. I stretch my right arm up. 1-5 and down. 	"Keep your elbows straight!" "Look at your hand as you point it up." "Keep your feet flat and close to your chair." "When we say and down, grab the same rung you were on."	Extend fingers of right hand to release rung, then lift extended right arm above shoulder level. (and down) Target grasp to original rung.
14. I lift my left arm up. 1-5 and down. 	"Keep your elbows straight!" "Look at your hand as you point it up." "Keep your feet flat and close to your chair." "When we say and down, grab the same rung you were on."	Extend fingers of left hand to release rung, then lift extended left arm above shoulder level. (and down) Target grasp to original rung.
15. My feet are flat. 1-5 	"Put your heels down." "Keep your feet close to your chair." "Keep grabbing." "Keep your head up."	Place entire plantar surfaces of both feet on floor directly in front of chair and bring knee to approximately 90° angle.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches voluntary grasp and release, targeting and lifting of the arms. Promotes hip flexion, eye-hand coordination, breaking of ATNR.	Sitting. Grasp and release of any object.	
Promotes ankle dorsiflexion for weight bearing on legs. Teaches conscious inhibition of extensor thrust.	Sitting. Standing.	
Promotes lifting of one arm. Teaches voluntary release and improves sitting balance. Prepares for ind. sitting.	Dressing. Hand washing. Release of any object.	
Promotes lifting of one arm. Teaches voluntary release and improves sitting balance. Prepares for ind. sitting.	Placing blocks in bowl. Hand washing.	
Promotes ankle dorsiflexion for weight bearing on legs, Teaches conscious inhibition of extensor thrust.	Drinking. Standing.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
16. I stand up. 1-5 	"Keep grabbing the chair as you pull up." "Keep your hips bent and your wrists and heels down." "Keep your head up and in the middle and elbows straight."	Pull body forward with hands and arms and extend knees to push body up into standing.
17. I sit down. 1-5 	"Sit down slowly into your chair." "Keep grabbing the chair with straight elbows."	Flex knees, hips and ankles while maintaining grasp of chair rung.
18. I let go. 1-5 	"Put your hands down to the corners of your own chair to help you sit up tall." "Keep your feet flat and head up." "Look at your hands."	Extend fingers and thumb to release chair rung while elbows remain extended.
19. I grab the corners of my own chair. 1-5 	"Grab the corners and sit up tall." "Keep your feet flat and head up."	Grasp corners of chair on which child is seated while maintaining support of upper trunk on hands and arms.
20. I sit straight. 1-5 	"Grab the corners and sit up tall." "Keep your feet flat and head up."	Extend elbows maximally to support upper trunk. Raise head while maintaining grasp.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Prepares for independent standing. Allows weight-bearing on legs while hands and arms help support the body. Teaches conscious inhibitions of extensor thrust, flexor withdrawal, arm flexion.	Standing, while bearing some weight on hands and arms.	
Teaches voluntary controlled hip flexion independently of total flexion pattern. Promotes weightbearing and head control.	Change of place by sitting down. Sitting.	
Teaches voluntary release and targeting. Promotes weight forward.	Placing blocks in bowl. Releasing cup on table in drinking.	
Teaches targeting. Promotes weight forward. Prepares for independent sitting.	Sitting.	
Prepares for independent sitting. Promotes weight forward. Weight-bearing on hands and arms as well as legs.	Sitting.	

Individual Tasks and Facilitation Descriptions (S2)

The following individual tasks were designed to prepare each child to maintain an independent, stable sitting posture which would eventually allow him to rise from a sit to a stand. The goal of each task is standing.

The ability levels range from requiring only light facilitation to rise from a chair with no support (no chair or stick to hold - merely clasping hands) to requiring heavy facilitation at both hands and feet to maintain stable sitting.

Two children are not represented in this section. One child (Lori Knapp) had no formalized task, but was given independent sitting work each time. A second child (Linda Regal) was undergoing orthopedic evaluation for a possible hip dislocation and it was not considered prudent for her to bear weight at that time.

JEFF ANDERSON

Individual Goal-Tasks and Facilitations.

1. Tasks without braces, before they are put on:

   He should be stood at the ladderback chair with the facilitator holding his knees straight with his feet quite far back. The conductor facilitating him should also be conscious of decreasing pressure on the knees. Jeff's task is to go up and down (all the way) the rungs with his hands. The hands should not move one at a time. He should be encouraged to move the two hands up and down the rungs together.

2. Put the braces on his legs in such a way that the center of the knee pad is directly over the knee cap. He stands between two little chairs holding on to them. His feet, especially his knees, should be a little bit apart. His task here is to raise his arms alternately from the chairs, point his hands to the ceiling and look at his hands. Another task in this standing position is to bend forward at the waist and look at the floor and then come up and look at the ceiling. Make sure that he straightens up at the hips when he is to look up.

   After five to ten minutes of standing in this manner and doing these tasks with the braces, the braces are to be removed and these same tasks are to be repeated for a similar amount of time.

   NO WALKING IN THE BRACES.

LUANN ASPEN

Individual Goal-Tasks and Facilitations.

1. Standing up from her chair. With hands clasped and arms straight out in front, bringing the head forward and bending forward at the hips, she should stand up, straighten her legs and sit down slowly. Very light facilitation on the wrists on her clasped hands may be necessary. Caution should be exercised not to let her flex her arms. They must be kept straight out so that her standing is accomplished in the correct balance attitude. When she will flex her arms, she then tends to use the facilitating conductor too much and to depend on her too much.

2. Getting up from the floor. She should come to a kneel and get on her feet keeping her hands on the floor. She should then shift her hands up to a large sandbag or box. She should come to a stand with slightly bent knees and hips and get back down again without going into extension and falling backwards. (Somebody should be standing at her side to catch her as she falls to the back or to the front.) But, the main facilitator should be in the front. When she stands up she should clap once or twice before she goes back down again.

ROOM COPY

DOREEN BALL

1. Sitting - Doreen should be facilitated in free sitting so that she, like Lloyd Loberger, is doing most of her work from the hips. She will need facilitation at the wrists holding her hands on the corners of the chair and at the ankles to keep her feet flat.

2. Standing - Two facilitators are needed, one at the front, the other at the back. The facilitator at the front should be the one who talks to Doreen. Talking and rhythmic intention should be centered around flat feet, grasp, straight elbows, and head up. It may be necessary to facilitate by completely holding her at the wrists with the facilitator's two hands in order to encourage her to straighten her elbows. It seems to be impossible to facilitate her directly at the elbows.

   The facilitator in the front will note that she tends to place much more weight on her right foot than her left. And as a result of this tendency, her left foot will tend to go out from under her or her left knee will tend to flex out of reflex activity. Her feet can be facilitated by the feet of the conductor, especially with the left side. It appears to be more advantageous to facilitate her straight knees from the "inside," the conductor crossing his wrists and pulling back on the knees with the contra-lateral hand of the facilitator. If she seems to be leaning on the forearms of the conductor, the facilitation may be changed so that the knees are held by the conductor's hands from the outside of Doreen's legs.

ROOM COPY

TED DITLEFSEN

Individual Goal-Tasks and Facilitations.

1. Walking. Ted should be walking and being encouraged now to bend his knees as he steps rather than swinging his legs from the hip. Pushing his chair, he should put his stepping foot up on the second rung of his chair before he puts it on the floor behind the chair. This must be done with both feet. Facilitation can be done at the hips (especially on the right side) for the purpose of keeping his knees abducted as he puts his foot on the chair. In other words, facilitation at the hips should be designed to keep the knee of the foot that is up on the rung of the chair straight ahead instead of adducted toward the midline. He must be continually encouraged to keep his head up.

   Wherever possible this kind of walking must be done whenever he changes his place. If there is a hurry involved in changing the place, such as going to the bathroom, he need not put his feet up on the rung of the chair with every step. However, the conductor should be there facilitating him at the hips so that his stepping to the side, as opposed to the midline, is accomplished.

MELODY GARRETT

Individual Goal-Tasks and Facilitations.

1. Sitting. For this task, Melody should be sitting in a regular wooden chair where the legs have been cut off and where the seat is about the same height as her own chair. Two people should facilitate her at ankles and wrists. Her hands should be on the corners of her chair. She should be encouraged to hold her head in the middle and look straight ahead. Her left leg seems to be much better and the fixture in her chair appears to have helped in keeping her knees abducted. Melody can be moved to the rug and can be encouraged to sit with her legs in a W position and to sit between the calves of her legs. Facilitation here should be in keeping her hands on the floor and push up with her hands.

2. Standing. Two facilitators. The conductor in the front, sitting on the seat of the ladderback chair, facilitates Melody in her grabbing of the chair, six rungs up from the seat. The facilitator in the front watches and encourages as she keeps her head up and that she continues to grasp correctly, especially noting that her thumbs are hooked around the rung. Try for decreasing pressure of facilitation at the wrists, but not too soon.

   The facilitator behind Melody concentrates on her left leg and foot, holding her left foot on the floor with the conductor's foot and holding the knee back with the conductor's left hand. The right hand can facilitate Melody at her right hip, holding her straight and encouraging abduction of the right knee. (Melody's left leg seems to be so much better now as is her functional grasp.)

ROOM COPY

LLOYD LOBERGER

Individual Goal-tasks and facilitations.

1. Legs should be hot-packed at knees prior to any attempts to get them perfectly straight.

2. Sitting - prior to standing activities, Lloyd should be encouraged to sit free with his feet flat on the floor and his head up straight. The main aim is to get him to work from the hips and to sit with his arms down and hands on the corners of the chair. He has more trouble straightening his right arm than his left, and he tends to fall to the right. Encourage him to straighten his arms and facilitate at the wrists when his hands are down so that he can work at sitting up straight supporting himself equally on both flat feet and his head looking straight ahead.

3. Standing - move him to the ladder-back chair. This will take two facilitators, one in the front facilitating wrists and straight arms and the other in the back facilitating straight legs. The facilitator in the front should be the one to talk to Lloyd. She should encourage Lloyd to look at her and to hold his head up with his elbows straight and his legs straight and his feet flat. Frontal facilitation may alternate between wrists and elbows. When facilitating at the wrists, it is helpful to have the facilitator hook her two thumbs over the rung of the chair and facilitate at the wrists with the index finger. When facilitating at the elbows, the direction of pressure should be such that his wrists are flexed dorsally and "wrinkles are in the his wrists."

   The facilitator in the rear should facilitate flat feet with his own feet (he is sitting on Lloyd's chair at this point). Facilitation at the knees should mostly be accomplished by having the facilitator cross his wrists between Lloyd's legs and pulling back on his knees using his forearms as a support to make sure his legs are straight. However, if it seems as if he is leaning, or sitting, on your forearms, facilitation may be switched so that the facilitators hands are on the outside of his legs and he is pulling back with his hands.

   The hot-packing should make it easier to facilitate Lloyd's knees from the outside and this would be the most advantageous future way of facilitating.

TIM REICHERT

Individual Goal-Tasks and Facilitations.

1. Kneeling - Goal - to help bent knees with weight and encourage hand down and balance. Conductor in the back stabilizing feet and pulling up at the hips telling him to (a) bend his knees and (b) to keep his hands down and head up. Get him to again go forward slowly. Repeat cycle 4-5 times. He can finish this by moving his hands to the seat of his chair as if preparing to transfer from floor to chair. Cycle may need another facilitator at his head working on his hands.

2. Standing - Big problem is hips - flexor spasticity keeps him from straightening up even though knees are straight. One possibility is a Bobath-type hip extension. R.I.P. following hot packing of hips.

   After he comes off the chair it seemed good to have him:
   (1) stand grasping third rung from top.
   (2) come down so he's sitting on his rear on the floor back against conductor.
   (3) roll him forward so weight is on (over) feet.
   (4) get him to climb back up again, facilitating at the beginning.

NANCY SCALZO

Individual Goal-Tasks and Facilitations.

1. Free sitting in a chair. Nancy should be facilitated at the ankles and encouraged to work with her hands, getting them onto the corners of her chair and keeping them there. She should then be facilitated at the wrists once her hands are in position and should be encouraged to have her feet flat on the floor with her heels and the backs of her legs against the legs of the chair. She should be encouraged to lean forward from the hips. Facilitation, as always, should be concentrated on decreasing pressure.

2. Standing from a squat, low box, and/or chair. After Nancy has been moved to the floor, the facilitator should get behind her and, with the conductor's arms under Nancy's armpits and her hands on her knees or around the tops of her calves, she should be rolled forward so her weight is on her feet. She should then be asked to push up from her feet and the conductor should note at which point her whole body goes into extensor thrust. She should then be encouraged to push up to that point five to ten times and the conductor should tell her to stop before the time where that reflex takes over. The conductor should then tell her to go back down again. Nancy can be moved to a box that is about the same height as one of the pink pots. Get her to do the same sort of push-up's standing. Eventually, she should be able to do this from her own chair.

3. Walking. This is a suggestion and should not be tried if there are any doubts in your mind as to whether you can be consistent with these suggestions. She can be walked with the conductor behind her facilitating hip flexion only. Nancy is able to step and to put her feet flat if the conductor holds her at the hips and facilitates the outward rotation at the hips as she steps. It may work better if another conductor is in the front facilitating her straight arms grasping a chair. The facilitation point should probably be at the wrists.

Individual Tasks (S3)

Three Subgroups

In order to deal effectively with the varying standing and walking abilities in the group, the following three subgroups were organized and each is described separately below.

In each group, the emphasis is slightly different in order to allow for individual differences. All tasks, however, are designed to improve those skills needed for stable, independent sitting, rising to a stand and sitting down from a standing position. Some attention is given to stepping.

Subgroup 1.

The two children comprising this group spend the majority of the period in achieving and maintaining the W or frog sit position. This position is designed to promote symmetrical inward rotation of the hips, outward rotation of feet and legs in order to provide an adequate symmetrical base for sitting and standing.

Subgroup 2.

This group consists of three of the higher functioning children. The tasks are designed to promote better coordination and balance; as well as better leg and foot position in weightbearing and stepping.

Subgroup 3.

For those children unable to maintain stable sitting independently, a special Plinth Series was developed. It includes those movements necessary for grasping (for support), alternate weightbearing on the feet and legs, rolling, pushing off, standing and sitting down from a stand. Stepping is included as an application of the tasks learned in the series. A documentation chart follows the written series.

INDIVIDUAL TASKS
Tim and Melody
Subgroup 1

Both hips hotpacked for fifteen minutes
(Do 2 or 3 times)

A. Come up and down to and from a W-sit.

1. Both lie straight in prone - stomachs flat, legs straight, arms stretched out above heads and heads on floor and in the middle. "I lie straight" or "I lie flat" can be intended to achieve this position. They should do this without facilitation.

2. Have Tim walk back pushing up with arms into a W sit. Sit behind him facilitating as needed at foot and/or ankle to keep (right) leg(s) flexed and at hip or knees for hip flexion. Allow him to free sit in this manner and move to Melody. "I come up", etc., can be intended.

3. Have Melody walk up into the W sit using hands and arms in a similar manner but facilitation usually consists of fixing her feet and ankles in a stable position and aiding in flexion at the hip and sometimes facilitating at the wrists for "walking back" of the hands and arms. Encourage her head up and in the middle because she tends toward total flexion while coming up. Intend, "I come up."

4. Both free- sit in W position. Light facilitation may have to be given to Melody to maintain sitting balance. She must be reminded to keep her head in the middle. It helps greatly if she can fix her gaze on an object which forces her head to the middle. "My elbows are straight," "My head is in the middle," "I sit up straight or tall" can be intended as needed.

5. Melody walks down, extending each hand and arm outward as facilitation is given fixing the feet and ankles, at the hip and at the wrists as needed. Again remind her to keep the head looking straight ahead rather than down. She returns to her flat, straight position in prone.

6. Tim walks down in the same manner but the facilitator is able to stabilize his ankles together, allowing him to do the rest by himself, with very light (one finger) facilitation at either hip, if needed.

B. Stretching of Legs and Separation of Knees

1. Tim rolls on side in an extended position with legs straight and arms stretched above head. Facilitation is usually given at the wrists and at the leg closest to the floor to maintain this position. The other leg is then passively flexed (up to chest) and extended several times. The same procedure is done with Tim on the other side.

C. Transition

1. Tim rolls back to the prone position, walks up into a W sit, grabs a low rung on the ladder-back chair placed in front of him and walks up the ladder with his hands, pulling himself into a half-stand and sits onto his own chair placed in back of him. He sits in his chair for the next period, grabbing the ladder-back.

D. Standing and Walking (2 facilitators)

1. Melody free-sits in low adult chair (3 boards at back). She works at feet flat, elbows straight and head in the middle. She grabs a chair rung and pulls to a stand. Facilitation is given at the elbow, forearm or wrist as needed and from behind, at the knees, rotating the right knee outward.

2. Tim - grabs ladderback higher, pulls feet back to chair, using intention "I slide back." Chair should be weighted by facilitator in front if needed. Facilitation from behind to separate knees and feet may be given. Tim should pull up to a stand by himself as much as possible.

INDIVIDUAL TASKS
LuAnn, Ted, and Jeff

Subgroup 2

(All children seated on their own chairs before ladderbacks (Jeff's weighted with sandbag).

Refer to S 5.7, intentions 1, 2, 4 and 5, for illustrations for the following:

My feet are flat 1-5

I grab 1-5 (the chair in front)

My elbows are straight 1-5

I stand up

Ted remains in sitting position while LuAnn and Jeff do stretching of legs or he may do squatting down.

LuAnn and Jeff   Refer to S 5.4-C for figure.

1. I go down - down.	Squatting down. Heels should be flat and knees in good position. Weight should be forward and seats should not be on floor.
2. I go up - up.	Help to knees maybe needed. Legs should be straightened.

Repeat 1 & 2

After number 1

3. Knees apart, apart Knees together, together	Attention to knee and foot position.
4. I go up - up.	

Repeat number 3

Jeff sits on box and is given something to work with that will allow him to use his balance on box. After walking with the other two is completed, Jeff walks to his place in school (short distance).

WALKING

Refer to S 5.5-B for figure.

1. Jeff - is walked between two chairs with conductor sitting on a third in front of him. Stepping should be done without Jeff crossing his legs and with his heels down and legs as straight as possible without his braces. Encourage his pushing the chairs along with his stepping.

Walking must be started by 1:45 (all three walk in 15 minutes) then at 2:00 you must help in small group.

2. LuAnn & Ted Refer to S 5.2-A for figure.

Walk behind ladderbacks putting feet up on rung.

Left - up and down

Target on second rung.

Right - up and down

Ted - attention given to bent knee so it is straight ahead not adducted toward midline. Other leg should be straight (needs help). He should pick foot up and put it down - not simply slide it off rung.

I push

3. LuAnn - Figure below.

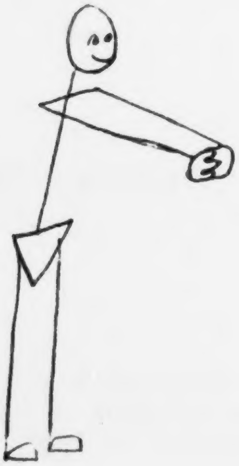
Walking free - hands together in front of her.

I stand up

She must get her balance before stepping. She stands up from the floor.

One

Two



STANDING AND WALKING(S3)

Subgroup 3

Lori, Linda, Lloyd, Nancy and Doreen

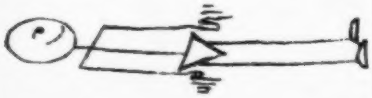
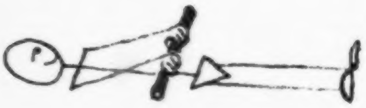
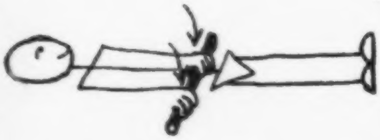
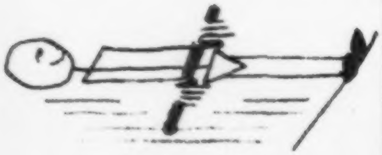
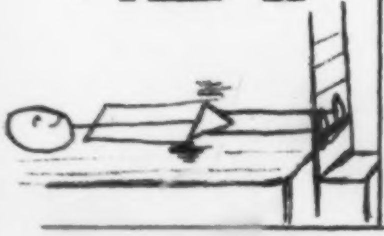
(Linda and Lloyd get regular small chairs without adaptations)

Begin pushing off at 2:10

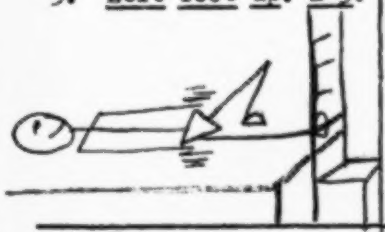
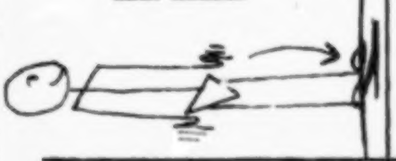
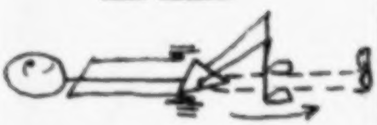
1. I lie straight. 1-5.	All should have head in middle, arms down and legs straight.
2. I grab. 1-5. (red sticks)	Lloyd - to grab and maintain stick, facilitate right hand. He should do left by self. Lori - needs little facilitation to maintain (sometimes none).
3. I push down hard. 1-5.	Maintain position and keep elbows straight.
I let go. 1-5.	Legs should be straight for the first four intentions.
4. I touch. 1-5. (ladderback chair)	Toe and knee position should be perpendicular to plinth. Arms at side.
5. Left foot up. 1-5.	Other leg remains straight. Plinth facilitation sliding and keeping foot on plinth.
Left foot flat. 1-5.	Have good foot and knee position.
And down.	Foot slides down plinth.
Same with right foot.	
Both feet up. 1-5.	
And down.	Legs return to straight position.
6. Left foot up. 1-5.	Lifting up.
And down.	
Right foot up. 1-5.	
And down.	
Both feet up.	Heels off plinth.
And down.	

7. I stretch my arms. 1-5.	
8. I roll over. Over.	Must be done with straight arms. They roll any direction. Should be done on one plinth.
9. My hands are open.	
10. I push off. 1-2, I push.	
I grab the plinth. 1-5.	
My feet are flat. 1-5.	
11. I stand up. 1-5.	Linda sits down and says intentions while sitting well.
My elbows are straight.1-5.	
12. I sit down.1-5.	Slowly maintain grasp.
13. I grab. 1-5.	Grab corners of chair - keep hands on plinth until count begins.
I sit up tall. 1-5.	Straight arms and feet flat. Doreen and Nancy might be allowed to sit alone without grabbing corners if this seems feasible.
	Lloyd and Doreen walk to table (Lloyd is pulled quite near to his place and then walks) behind ladderbacks. (Two facilitators on each). Nancy and Lori are put on pot or pulled to table.

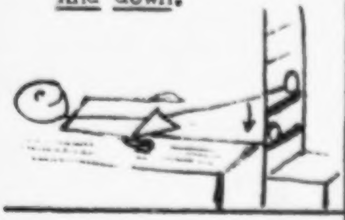
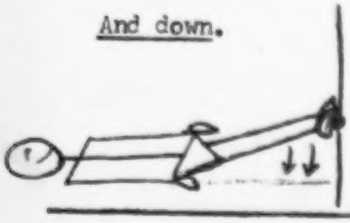
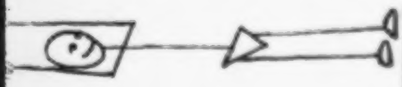
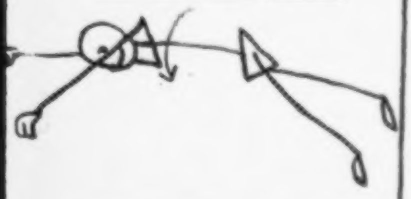
DOCUMENTATION CHART (S3)

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
1. I lie straight. 1-5. 	"Keep your head in the middle." "Arms down and legs straight." "Point your toes to the ceiling."	Extend legs and arms maximally. Place palmar surface of hands at the sides of the body on slats of plinth while keeping head in midline.
2. I grab. 1-5. 	"Look at the stick while you grab with both hands." "Keep your legs straight and head in the middle."	Extend fingers and abduct thumb to grasp, one hand at a time, a stick held by facilitator.
3. I push down hard. 1-5. 	"Straighten your elbows and keep grabbing the stick." "Keep your legs straight and head in the middle."	Extend elbows to place stick on abdomen while maintaining grasp with both hands.
I let go. 1-5. 	"Keep your arms down and look at the stick as you let go." "Try to let go with both hands at once."	Extend fingers to release. Elbows remain extended.
4. I touch. 1-5. 	"Put both feet flat on the rung." "Your legs are straight if both feet are touching." "Keep your arms down at your sides and head in the middle.	Place plantar surfaces of both feet on chair rung, keeping ankles dorsiflexed.

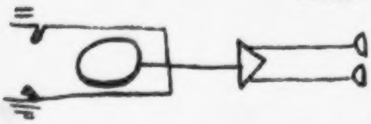
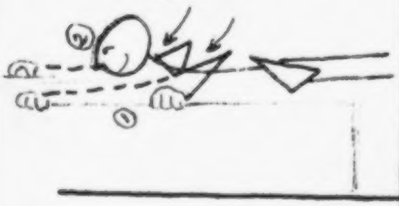
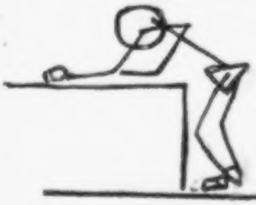
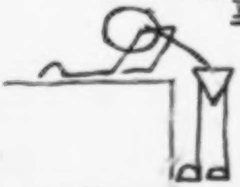
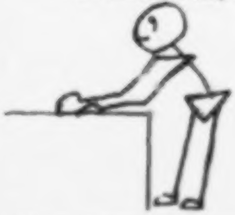
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes body symmetry.	Standing. Sitting.	
Teaches voluntary grasp. Prepares for supporting with hands and arms. Promotes weightbearing and eye-hand coordination. Teaches conscious inhibition of ATNR, STNR and Moro reflex.	Standing. Sitting. Grasp of objects.	
Promotes symmetrical elbow extension. Teaches conscious inhibition of Moro reflex. Prepares for weightbearing with hands and arms.	Standing. Sitting. Grasp of objects.	
Teaches voluntary release of grasp. Teaches conscious inhibition of ATNR and Moro reflex.	Standing. Sitting. Release of cup after drinking.	
Prepares for weightbearing. Teaches conscious inhibition of extensor thrust and flexor withdrawal and ATNR.	Standing. Sitting.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
5. Left foot up. 1-5. 	"Keep your right foot flat against the rung so your right leg is straight." "Slide your left foot up the plinth." "Arms down and head in the middle."	Slide entire plantar surface of left foot up the plinth to level of right knee which remains extended.
Left foot flat. 1-5. And down. 	"Put your left heel down." "Straighten your left leg until your foot is flat against the rung."	Press entire plantar surface of left foot down on plinth. Extend left knee until plantar surface of left foot comes in contact with chair rung.
Right foot up. 1-5. as above	"Keep your left foot flat against the rung so your left leg is straight." "Slide your right foot up the plinth." "Arms down and head in the middle."	Slide entire plantar surface of right foot up the plinth to level of left knee which remains extended.
Right foot flat. 1-5. And down.	"Put your right heel down." "Straighten your right leg until your foot is flat against the rung."	Press entire plantar surface of right foot down on plinth. Extend right knee until plantar surface of right foot comes in contact with chair rung.
Both feet up. 1-5. And down. 	"Slide both legs up and keep both feet on the plinth." "Arms down and head in the middle." "Keep your bottom on the plinth." "Straighten both your legs until both feet are flat against the rung."	Symmetrically flex knees and slide entire plantar surfaces of both feet up plinth until both ankles are fully dorsiflexed. Extend both knees until plantar surfaces of both feet come in contact with chair rung.

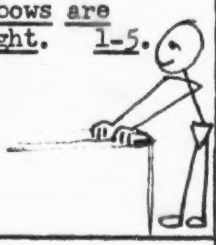
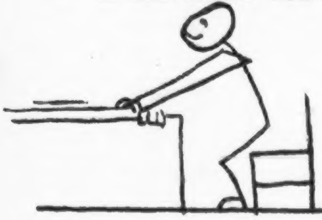
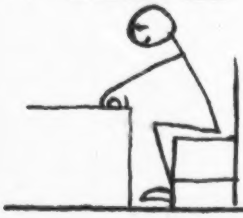
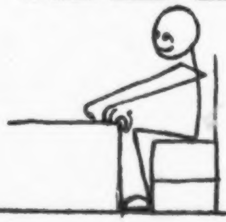
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches conscious inhibition of ATNR, crossed extension, extensor thrust.	Stepping.	
Teaches conscious inhibition of ATNR, crossed extension, and extensor thrust. Promotes ankle dorsiflexion.	Stepping.	
Teaches conscious inhibition of ATNR, crossed extension, extensor thrust.	Stepping.	
Teaches conscious inhibition of ATNR, crossed extension, and extensor thrust. Promotes ankle dorsiflexion.	Stepping.	
Teaches conscious inhibition of total flexion pattern. Promotes voluntary hip flexion and coordination in placing feet.	Sitting. Stepping.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
6. Left foot up. 1-5. And down. 	"Keep both legs straight as you lift the left one up and down." "Remember arms down and head in the middle."	Lift extended left leg to place dorsiflexed foot one rung higher than original position. Lift extended left leg to return dorsiflexed foot to original position.
Right foot up. 1-5. And down. as above	"Keep both legs straight as you lift the right one up and down." "Remember arms down and head in the middle."	Lift extended right leg to place dorsiflexed foot one rung higher than original position. Lift extended right leg to return dorsiflexed foot to original position.
Both feet up. 1-5. And down. 	"Keep both legs straight as you lift both up and down." "Remember arms down and head in the middle."	Lift extended legs to place dorsiflexed feet one rung higher than original position. Lift extended legs to return dorsiflexed feet to original position.
7. I stretch my arms. 1-5. 	"Keep your legs straight while you stretch your arms above your head."	Extend elbows and protract shoulder girdle maximally to stretch arms above head.
8. I roll over. Over. 	"Put your head on your arm and keep your arms straight above your head while you roll." "Stay on your own plinth." "Keep your legs straight without crossing."	Roll from supine to prone in a segmental pattern with head leading the body.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches lifting of leg and targeting for stepping. Teaches conscious inhibition of extensor thrust and crossed extension. Promotes perceptual training.	Stepping. Standing.	
Teaches lifting of leg and targeting for stepping. Teaches conscious inhibition of extensor thrust and crossed extension. Promotes perceptual training.	Stepping. Standing.	
Teaches lifting of legs and targeting for stepping. Teaches conscious inhibition of extensor thrust and crossed extension and STNR.	Stepping. Standing.	
Prepares for rolling to prone. Teaches conscious inhibition of arm flexion.	Putting shirt over head for dressing.	
Promotes segmental rolling. Teaches conscious inhibition of total flexion pattern in prone.	Change of place from supine to prone. Change of place to push off.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
9. My hands are open. 1-5. 	"Keep your elbows straight as you open your hands."	Place entire palmar surface of both hands on plinth while elbows remain extended above head.
10. I push off.1-2. I push. 	"Slide one hand to your chest (1) then the other (2), now push back." "Keep your stomach flat, legs straight and head in the middle." "Put your fingers on one side of the slat and thumb on the other."	While maintaining grasp on plinth, alternately slide one hand to shoulder level, then the other. Simultaneously extend both elbows to push body back.
I grab the plinth. 1-5. 	"If you don't have a tight hold on the plinth, grab it now so you can stand tall." "Put your thumb on one side of the slat and fingers on the other."	Extend fingers and abduct thumb to grasp plinth slat.
My feet are flat. 1-5. 	"Bend your knees." "Put your heels down." "Keep grabbing the plinth."	Flex knees to slide foot up until entire plantar surface rests on floor.
11. I stand up. 1-5. 	"Keep grabbing." "Head up." "Don't rest against the plinth." "Keep heels down and knees straight."	Extend elbows and raise head to bear weight on both arms and legs in supported standing position.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes grasp and release and voluntary finger and thumb extension.	Change of place by pushing off. Grasp and release of cup.	
Teaches conscious inhibition of ATNR, STNR and total flexion pattern. Promotes functional voluntary grasp, and weightbearing on hands and arms.	Change of place by pushing off. Standing.	
Teaches voluntary grasp. Teaches conscious inhibition of arm flexion.	Grasp and release.	
Teaches dorsiflexion of ankle, knee flexion, weightbearing on hands and arms. Breaks up crossed-extension and extensor thrust.	Standing. Sitting.	
Teaches weightbearing on arms and legs, extension of elbows and knees. Breaks up extensor thrust and crossed extension patterns.	Standing. Walking.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
My elbows are straight. 1-5. 	"Keep grabbing." "Raise your head."	Maximally extend elbows while maintaining grasp.
12. I sit down. 1-5. 	"Sit down slowly while you keep grabbing." "Keep your feet on the floor."	Flex hips and knees to sit down on potty or chair while grasp on plinth controls the movement.
13. I grab. 1-5. 	"Let go of the plinth and put your hands on the corners of your chair." "Keep your head up and in the middle while you let go."	Extend fingers and abduct thumb of each hand to release plinth slat, lift arms (one at a time) and place open hand on chair edge to grasp it and extend elbow to support upper body.
I sit tall. 1-5. 	"Straighten your elbows and lift your head." "Keep your feet flat and close to your chair."	Extend elbows maximally and raise head to support upper trunk while grasp on chair edge is maintained.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches head control, weightbearing on hands and arms. Promotes functional grasp.	Standing. Grasp of any object.	
Teaches controlled hip flexion while maintaining protracted shoulder girdle and grasp. Breaks up extensor thrust and ATNR.	Sitting down. Grasp.	
Teaches voluntary release and grasp, lifting of one arm while stabilizing with the other, and weightbearing on hands and arms.	Sitting. Pushing off.	
Teaches conscious inhibition of total flexion and extensor patterns. Promotes weightbearing on hands and arms and head control.	Sitting. Standing.	

Standing and Walking (S4)

One Group, Monday-Friday

From three subgroups the children have been returned to one single group meeting together each day. The following explanation and corresponding documentation chart shows the attention to individual differences as well as the stated intentions for the entire group.

Four children, who are unable to sit stably away from the table without the aid of a teacher-therapist, sit at the table and are given the opportunity to stand at least once. They repeat the intentions concerning sitting and perform the movements designed to lead to more stable sitting while the group sitting away from the tables take turns standing.

Special attention is given to one child who is able to take some independent, unsupported steps.

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9-18-71

Standing and Walking - 1:30 - 2:30 PM

(This period is devoted primarily to the improvement of the sit to stand change of place and the stand to sit change of place, and to give some experience in weight bearing. A far-reaching goal might be learning to step. For Nancy especially, attention is on stable sitting.)

Braces - Jeff
&
Shoes - Ted

Hotpacked - Tim & Linda

There are normally four facilitators during this time. One should lead the entire group, one should be responsible for the sitting group, one should walk with LuAnn and one should help Linda, Nancy and/or Ted to stand up. The lead conductor must help her with Tim (at first) and probably help Ted. LuAnn's helper will be available when she returns.

Group begins - (see diagram)

1. I grab the chair. 1-5.	Ted grabs two red sticks.
2. My feet are flat. 1-5.	
3. I stand up. 1-5.	Jeff and LuAnn alone.
4. I stand tall. 1-5.	Can add"Elbows straight."
5. I sit down. 1-5.	Slowly, with control.

LuAnn - leaves with one conductor for free walking. Group repeats above with attention to good sitting posture before standing - here the table group is included with good sitting as the goal. "I grab" for them should be table top or stick. Variation may be introduced as needed, but no games or songs until LuAnn returns.

After LuAnn reports her progress to the group, any game, song, or activity may begin, provided each child is provided the chance to stand up (or sit tall) with the attention of the group focused on him. For Jeff, LuAnn, Ted and eventually Tim and Linda the time spent standing should gradually increase along with increased independence in rising from a sit. Stepping might be introduced as a reward for superior standing or as part of an activity.

At 2:15 - 2:20 - the focus shifts to the sitting group who stand two by two behind ladderback chairs - Lori and Doreen, then Mel and Lloyd - The four facilitators combine efforts. They Say:

I grab the chair. 1-5.

My feet are flat. 1-5.

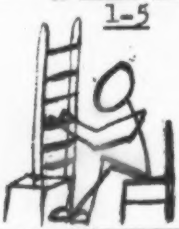
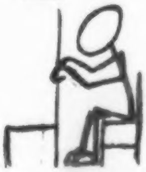
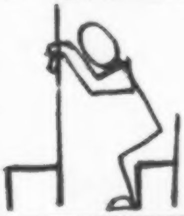
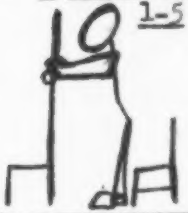
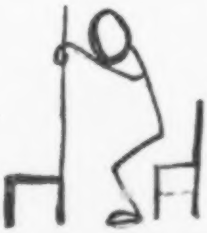
I stand up. 1-5.

I stand tall. 1-5.

I sit down. 1-5.

Everyone moves to tables for juice (2:30).

DOCUMENTATION CHART (S4)

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
1. I grab the chair. 1-5 	"Stretch your elbows - grab with both hands." "Keep your wrists down." "Head in the middle."	Voluntary bilateral grasping of the chair rung at shoulder height. Active hip flexion and elbow extension, shoulder girdle protraction.
2. My feet are flat. 1-5 	"Slide your feet back to your chairs." "Keep your heels down." "Put your feet together (or apart)."	Flexion of knees and increased dorsiflexion of feet as plantar surface maintains firm contact with floor.
3. I stand up. 1-5 	"Grab tightly." "Push with your legs." "Pull yourself up."	Arms and shoulder girdle act maximally to pull body forward as legs extend to push up and support lower trunk.
4. I stand tall. 1-5 	"Head up." "Elbows straight." "I grab higher." (Linda, Tim)	Maximally extend knees and elbows, and back with head erect. Hips maintain slight flexion. Weight borne equally on feet.
5. I sit down. 1-5 	"Bend your knees." "Sit down slowly." "Keep grabbing."	Controlled flexion of knees and hips for symmetrical support of trunk during downward movement. Maximal grasp and continued arm extension.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Prepares for standing by putting weight of trunk forward, transferring some weight to arms and hands.	Grasping another piece of equipment, either in front or at sides, in preparing to transfer self to chair or toilet.	Jeff - Ted - grab 2 small chairs back-to-back and stand between. LuAnn - clasps hands in front of herself.
Prepares for standing by positioning feet to bear weight, legs to thrust weight upward.	Stable lower trunk frees hands for eating, grooming, manipulating objects with or without table.	
Prepares for symmetrical weightbearing using chair for balance.	Standing, walking. Transfer to another piece of furniture.	Jeff - Ted - stand between 2 small chairs. Step, moving the chairs with their hands. LuAnn - free standing with clasped hands. Tim - I grab higher. Linda - I grab higher.
Prepares for stepping while pushing a chair forward. (Conditions equilibrium for vertical position.)	Stepping, walking with support in front.	Jeff - Ted - lift one hand from a chair at side, then lift other hand.
Prepares for safe transfer from one place to another, from bed to chair, or chair to toilet.	Independent transfer from bed to chair, or chair to box, or to toilet.	LuAnn - sits down with no support.

Standing and Walking (S5)

Three Subgroups, MWF
One Group, TT

The inclusion of all children in one group did not allow sufficient attention to individual differences; therefore, the following compromise was reached as a solution:

On Monday, Wednesday and Friday, the group is divided into three subgroups as follows:

Subgroup 1.

(LuAnn, Jeff and Ted). In this group, attention is given to stepping both with and without knee splints, teaching the use of chairs and canes as supports, and squatting and turning around.

Subgroup 2.

(Melody, Tim, Linda and Nancy). This group contains those children who are able to sit supported by ladderback chairs either in front or at the sides, but need assistance and support (by a chair) to rise to a stand. Attention is given to stable sitting before rising to a stand and some weightbearing. The goal for this group is independent rising to a stand from a sit and independent return to a sit. Some attention is given to free sitting without support.

Subgroup 3.

(Lloyd, Lori and Doreen). The three children who comprise this group are presently unable to sit stably unless seated at a table. Attention in this group is given to independent grasp of a stick (See Description of Special Devices) held in front of the body (elbows extended) resting on the table. This prepares for grasp of a supporting chair and teaches leaning forward for stable sitting. The children are given the facilitation necessary to stand supported by a ladderback chair during the period and each one experiences some weightbearing. Some time is usually devoted to sitting away from the table with support.

The explanation following, describes the specific techniques employed by each subgroup.

For a more complete documentation, refer to S1 and S6.

On Tuesday and Thursday, the group remains intact as a unit and the procedure is identical to the Standing and Walking (S4), as described previously, with the following exceptions:

a. Three children leave the main group to form a stepping group, instead of one.

b. Those children assigned to the sitting group who demonstrate independent sitting skill are integrated into the standing group for short periods.

November 20, 1971

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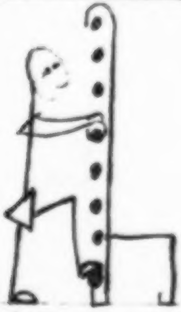
Standing and Walking
(Subgroup 1)

Jeff, Ted, LuAnn

LuAnn

A.) To promote alternate weighting of foot she targets on rung of ladderback with left then right.

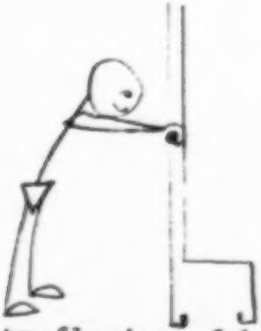
1. Left foot up - Up & Down



Watch for ankle dorsiflexion and outward rotation of leg. When stepping down from rung she should not return to original position but left foot just lifted should be placed ahead of the right foot which will next step up on rung.

2. Right foot up - Up & Down

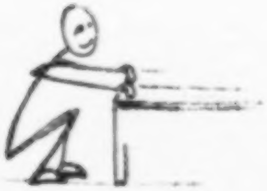
3. I push.



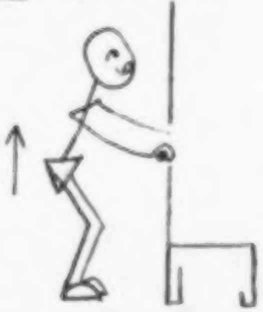
B.) To prevent retroflexion of knees she squats down to the floor. She should be encouraged not to grasp plinth (she needs it now) and keep weight forward when coming up to stand.

1. I go down. 1-5.

Go down slowly.



2. I stand up. 1-5. (Slowly and with control)

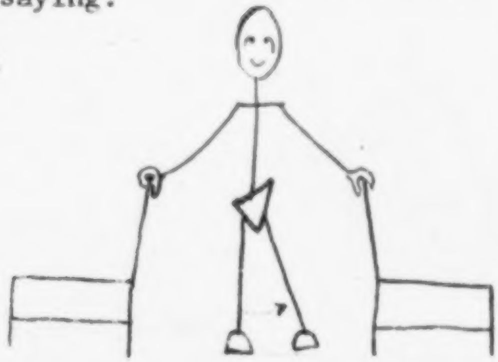


C.) Walks with helmet on between two lines (about 2 feet apart in width.) She should have arms forward. Eyes looking at hands. Care is taken so her stepping is straight and foot is lifted up when stepping. She should increase number of steps she takes.

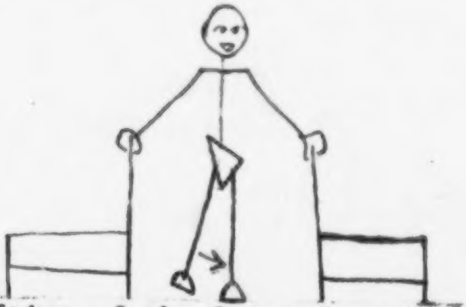
Ted

A.) To promote adduction, abduction and weight bearing he should walk sideways between two chairs. He alternately pushes one chair and pulls the other while stepping to the side saying:

1. Apart

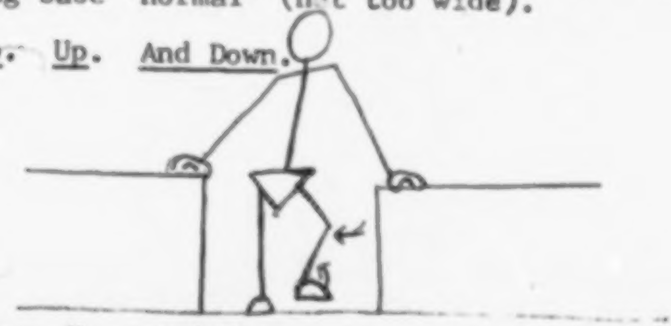


2. Together



B.) To promote lifting of the leg and outward rotation of knee and ankle, Ted walks between two plinths. He alternately brings knee to touch a stick the teacher-therapist holds, and then steps down again. While flexing knee up attention should be given to the outward rotation of both knees (the straight and flexed knee). When stepping down Ted should step ahead. The foot position should be straight and the standing base "normal" (not too wide).

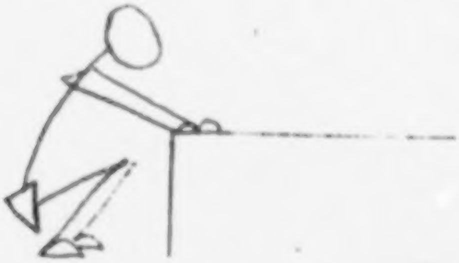
1. Left up. Up. And Down.



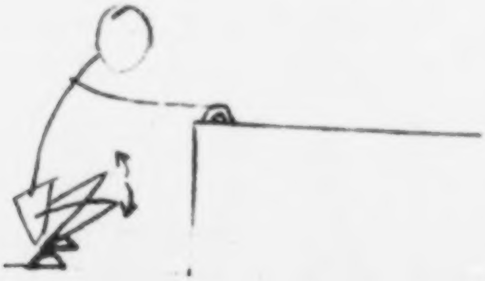
2. Right up. Up. And Down.

C.) To promote dorsiflexion, feet flat, adduction and abduction, he squats down when at the end of the two plinths. Attention so heels are down, and base is not to wide when squatting.

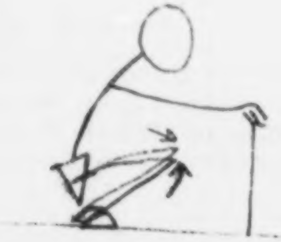
1. I go down. 1-5.



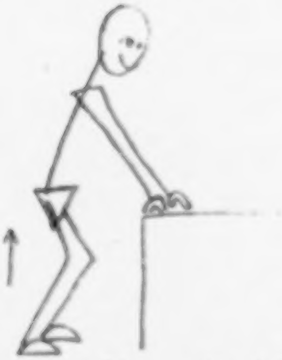
Apart. Apart. Knees apart.



Together.

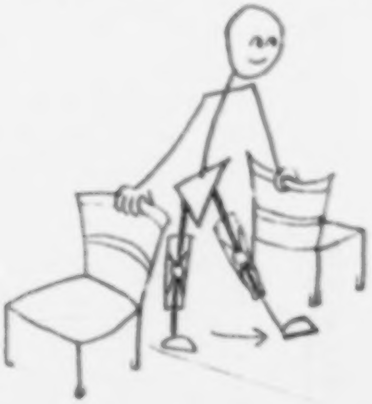


2. I stand up. 1-5.



D.) To promote leg extension and alternate lifting of legs while stepping, Ted walks betwen two chairs with braces on. When donning braces, Ted should help strap them on. While extending the leg, I stretch my legs. 1-5, should be intended. When walking, he goes between two lines (approximately 2 feet in width) sliding the two chairs at his side, ahead. His standing base should not be too wide and feet straight ahead when stepping. While stepping he says:

1. One



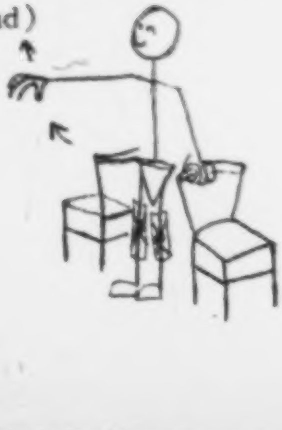
Two

Alternate beginning with left or right foot.

Jeff

A.) Braces on. Say, I stretch my legs. 1-5 when donning braces. To promote leg extension and heels down, he stands between two chairs and alternately lifts one hand up and then down. When hand is lifted up he should straighten arm and while looking at it, lift it as high as possible. Take care so that he isn't leaning on chair while lifting.

1. I lift up. 1-5. (right hand)

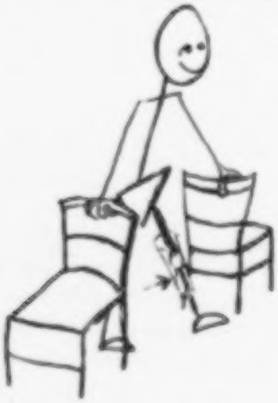


2. I lift up. 1-5. (left hand)

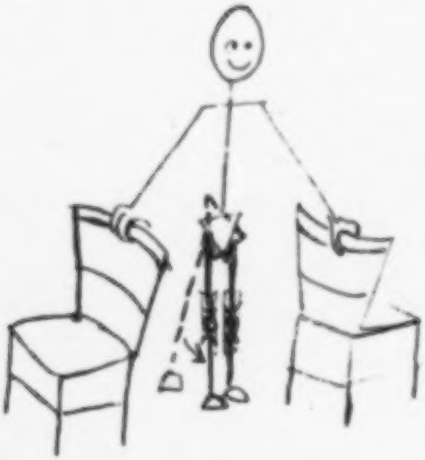
B.) For moving about he walks between two chairs, sliding them ahead as he steps. Take care that his base is wide enough, and he is stepping forward with his feet. Feet should bear weight while stepping. He says:

1. One.

Alternate which foot starts.



2. Two.



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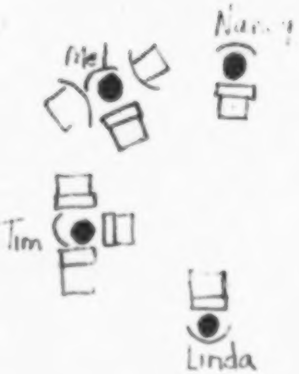
Standing and Walking
(Subgroup 2)

Tim, Nancy, Linda, Melody



Children in circular arrangement.

Linda - one unweighted ladderback in front.

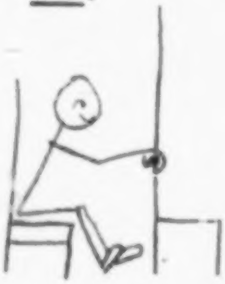
Melody - two chairs at sides, ladderback in front, helmet and shoes on.

Tim - one unweighted ladderback in the front, two ladderbacks at the side.

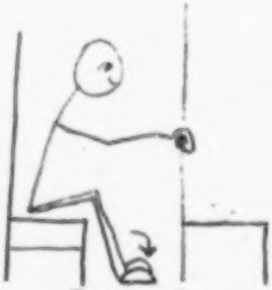
Nancy - ladderback in front, splint on left arm.

1. I grab the chair. 1-5.

Linda & Tim grab higher rung.

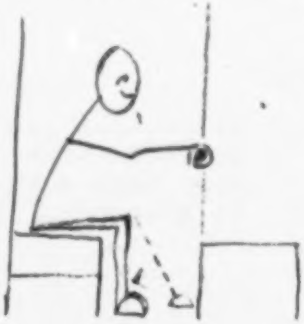


2. My feet are flat. 1-5.

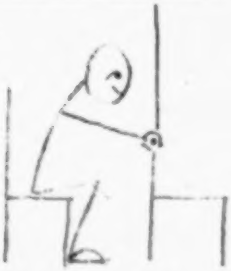


3. I slide back. 1-5.

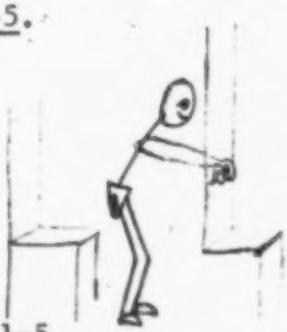
Feet closer to chair.



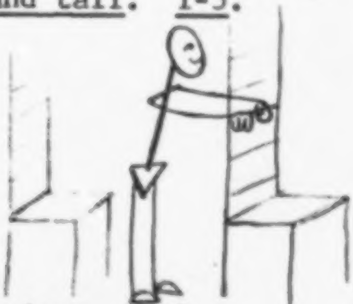
4. My elbows are straight. 1-5.



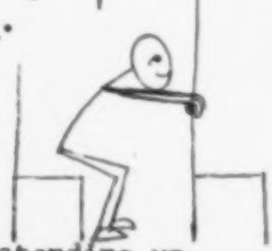
5. I stand up. 1-5.



6. I stand tall. 1-5.



7. I sit down. 1-5. Maintain grasp when sitting down.

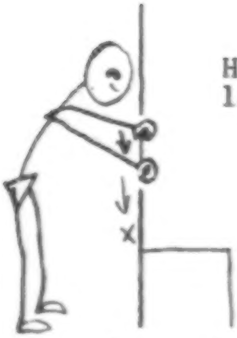


Children take turns standing up.

Tim

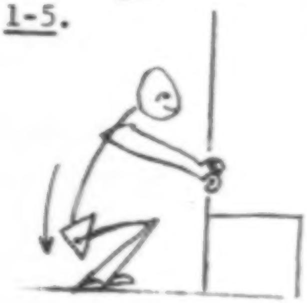
A.) To promote grasp-release, weight bearing on feet, abduction and adduction of legs, he comes to a stand from a sit, goes down into a squat, takes knees apart, together, then pulls to a stand. Two facilitators.

1. I go down. Down.



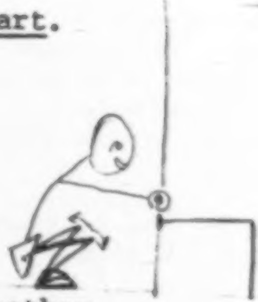
Hands go down rungs of ladderback. Look at hands.

2. I squat down. 1-5.



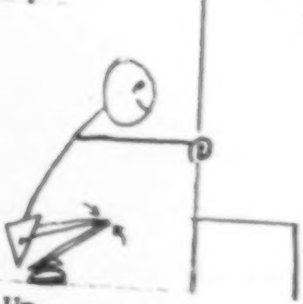
Feet should be flat. Base not too narrow.

3. Apart.



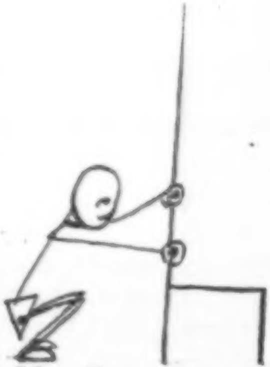
Knees apart. Feet flat.

Together.

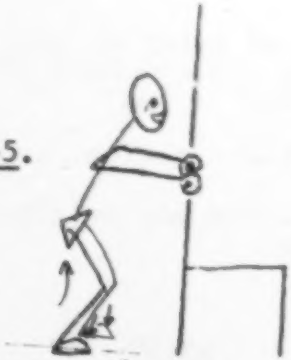


Knees together.

4. I grab higher. Up.

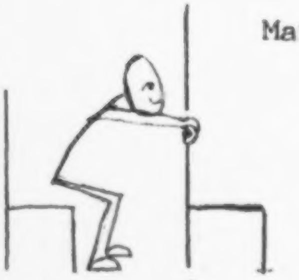


5. I stand up. 1-5.



Rolls forward to balls of feet and stands up.

6. I sit down. 1-5. Maintain grasp.



B.) To promote balance while standing, he grabs ladderback at the sides and stands up. After standing up (2 facilitators), Tim maintains stand with light facilitation. He should increase time of maintenance.

C.) To promote free sitting he puts hands on knees and increases time of maintaining that position.

Melody

A.) Stands up needing two facilitators. Knees and grasp are fixed while she pulls up to a stand. While standing, light facilitation is needed at hips or feet. She maintains grasp and needs facilitation to get head in middle. Sitting down should be slow controlled hip flexion, grasp should be maintained on chair.

B.) To promote head control while sitting she is shown middle and encouraged not to lean to chairs at either side.

Linda

A.) To promote upper trunk control, she is encouraged to straighten elbows either when grabbing chair or with hands on outer knees pushing knees together.

B.) Attention to adduction of legs while sitting and standing.

C.) Encourage maintenance of stand with light facilitation.

Nancy

A.) Promote maintenance of grasp on rung of ladderback while sitting and standing. Right hand should maintain grasp without facilitation.

B.) Encourage eye-hand coordination, especially when standing.

C.) Attention to hip flexion and weight bearing on feet while sitting and standing.

D.) Slow controlled hip flexion and sitting back down into chair also need attention.

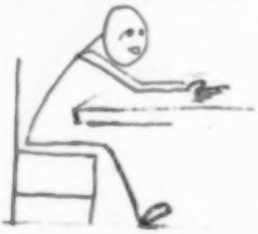
E.) Maintenance while standing needs encouragement.

Standing and Walking
(Subgroup 3)

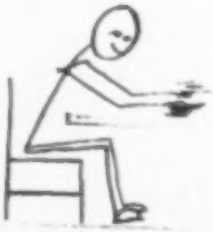
Doreen, Lloyd, Lori

Sit at tables grasping the slats. Lori is unstrapped. All three children have helmets on.

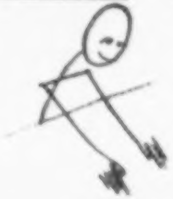
1. My hands are flat. 1-5.



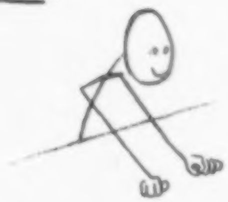
My feet are flat. 1-5.



My elbows are straight. 1-5. After straightening elbows arm splints are put on Doreen.

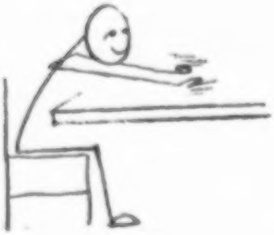


2. I make two fists. 1-5.

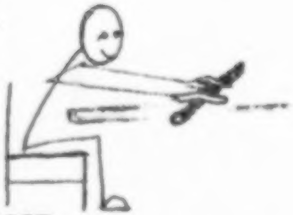


Open. as in fig 1.

3. I push down hard. 1-5.



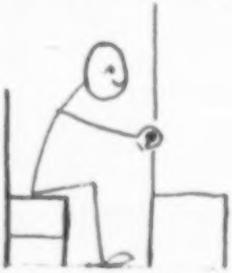
4. I grab the stick. 1-5.



Song for maintaining grasp.

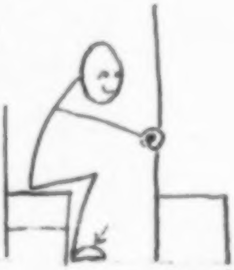
The children maintain grasp on stick while one child stands. Each child sits grasping the rungs of a ladderback. Encourage maintenance of sitting position without facilitation before standing up.

1. I grab. 1-5.

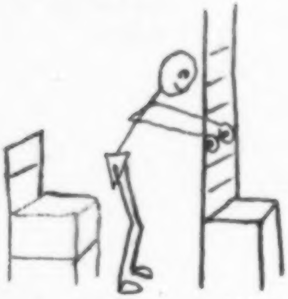


Children at tables watch and intend with teacher-therapist.

2. My feet are flat. 1-5.

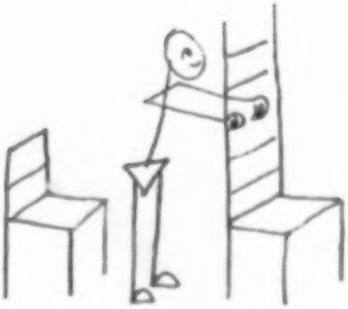


3. I stand up. 1-5.

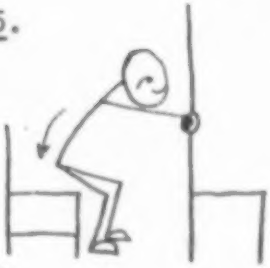


Lori - encourage maintenance of stand, head in middle. Support given at elbows only.
Lloyd - encourage maintenance of grasp and head in middle. After coming to stand, facilitation needed only for balance and grasp.
Doreen - needs help to maintain feet flat, knee extension and grasp. Encourage head up and leg extension.

4. I stand tall. 1-5.

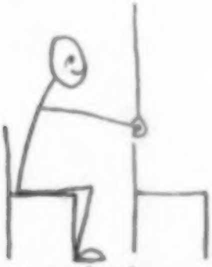


5. I sit down. 1-5.



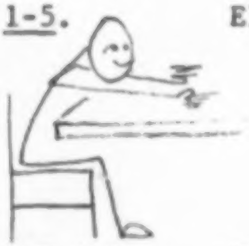
All should maintain grasp during and after sitting down movement. Maintain sit without facilitation when possible.

6. I sit tall. 1-5.



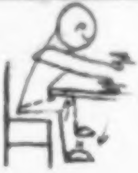
After all three children have stood they should continue class at tables.

1. My hands are flat. 1-5.



Elbows straight.

2. I push down hard. 1,2,3,4,5.

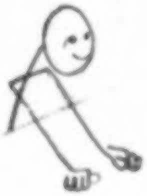


With left foot, push down on floor. Other foot remains flat and arms forward.

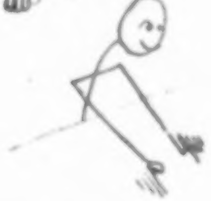
I push down hard, 1,2,3,4,5.

Repeat with right.

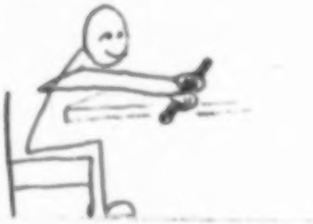
3. I make two fists. 1-5.



Open.



4. I grab the stick. 1-5.



Procedure for standing the second time is the same. If standing position is very good, a few steps may be taken.

Standing & Walking (S6)

Subgroup 1

(LuAnn, Jeff, Ted)

In this group, special attention is given to the boys involving the donning of braces and transfer of self from floor to chair. Teaching the use of chairs and canes as supports for proper weightbearing and stepping for change of place is also stressed.

Goals for LuAnn are the same as the above, but weightbearing without the use of braces, chairs or canes is emphasized. Balance and righting of self in free-standing and walking is stressed for her also.

STANDING & WALKING

Subgroup 1

Equipment: Leg braces for Ted, Jeff.
Helmets for Ted, Jeff, LuAnn.
2 small chairs for Jeff.
2 large chairs for Ted.
Cut down ladderback for Ted to sit on.
Canes for Ted.
LuAnn's box.
Ladderback for LuAnn - unweighted preferred

LuAnn, Jeff, Ted.

I. Applying Braces

After juice, LuAnn brings helmets, braces.
Jeff is pulled over on his chair.
Ted brings canes which he gets out of broom cupboard himself.

Jeff & Ted help with donning braces. (on by 10:45)

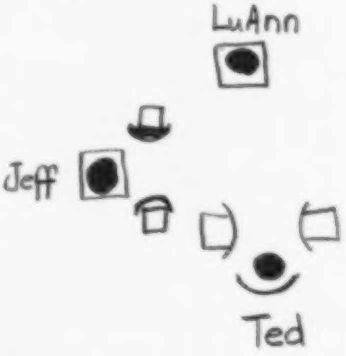
I stretch my legs. 1-5.
Is said while doing this. Both hook top straps and are encouraged to bend over and fasten ankle straps. They sit on floor with backs against divider and a chair seat on either side.

I sit up. 1-5.
Both use the flat part of the chair to push themselves up and back onto their chairs.

Simultaneously, LuAnn does deep knee bends at ladderback, supervised by #2 facilitator from the sitting-standing group.

I go down. 1-3 (slowly)
I come up. Up. (quickly)
I go down-down. (quickly)
I come up. 1-3 (slowly)

Knees apart-together done while squatting. Attention so she doesn't rest on floor.



II. Standing

Group stands together in semi-circle.

Ted - stands with 2 chairs at sides.
Jeff - stands with 2 chairs at sides.
LuAnn - stands from box, hands clasp in front of her, then hands on hips.

I stand up. 1-5.

I stand tall. 1-5.

Ted is given 2 canes after standing between chairs

I lift up - (left hand)

Ted is given 1 cane, with other hand he holds the chair.
LuAnn puts hands on hips.

Jeff and Ted - left hands first.
Ted points cane to ceiling.
Encourage to look at cane.
Encourage straight elbows.

Repeat I lift up.
(right hand)

Right hand lifted up.
Encourage straight spines.

I sit down. 1-5.

All sit down.

III. Side Stepping

Each child stands and side steps individually first.

Jeff - 2 chairs, helmet on.

LuAnn - hands on hips - stands freely.
Stand beside her and be example.
This standing beside her is rarely needed, sometimes a touch to her hand.
Then move to in front of her while she does free side stepping.

Ted - between 2 chairs

I step out - left
I close it - 2
I step out - right
I close it - 2

Children sitting have tamborines or maracas to beat in rhythm to stepping. At first they must intend with the child who is stepping, then they sing. Leader also has tamborine for beating rhythm.

Ted's standing - 2 chairs
"Point feet straight at me."
No facilitation on legs, but may straighten foot position.
Attention to right leg so he adducts it rather than stepping out again with the left.

Follow side-step intentions with song: (instruments for those sitting) "First I step out with the left - then I close it to-ge-ther. Now I step out to the right, then I close it to-ge-ther."

After each child side-steps alone, all stand in a group and sidestep. This activity will be developed later. Repeat intentions and song with group.

11:15 All begin walking to lunch table. Each takes something.

1. Jeff - (2 small chairs) carries 2 toothbrushes, possibly the instruments.
2. Ted - (T-cane in left hand, and chair). Takes a big wash basin and spit bowls. Needs supervision in walking.
3. LuAnn -walks with chair to divider. Walks freely from divider to plinths. From plinths to table she again goes with chair, with washcloths on it.

11:30 Leader of this group moves to the plinth group for standing and free sitting.

Pre-meal jobs supervised by leader temporary since she will be needed later.

Jeff - Toothpaste on 2 toothbrushes.

Ted - Pass out spitbuckets, pours water in toothbrush glasses.

LuAnn- Wets and wrings out washcloths. She should put them in basin and wring each one separately and carefully.

Removing Braces:

Ted - removes his as he reaches table area, before getting to his place: Top strap first (hip flexion)
Knee pads (stress grasp and release, pinch)
Bottom strap.
Ted pots after passing out spit bowls.

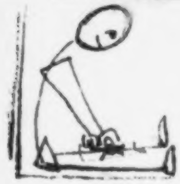
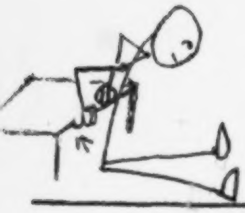
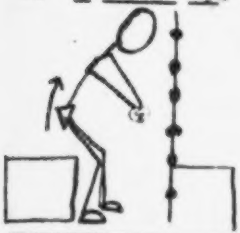
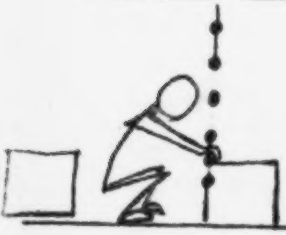
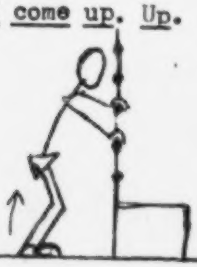
LuAnn- Pots if needed before going to her place at table.

Jeff -Goes to place at table and removes braces. Might need help with knee pads.

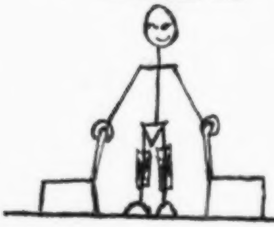
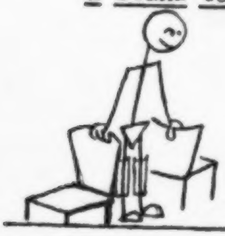
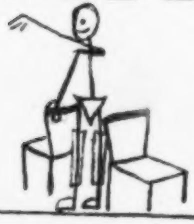
Canes replaced in broom cupboard.

Braces placed in medicine cupboard.

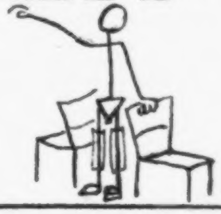
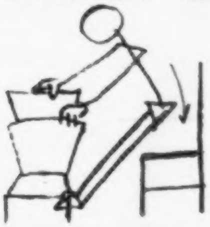
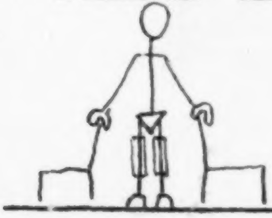
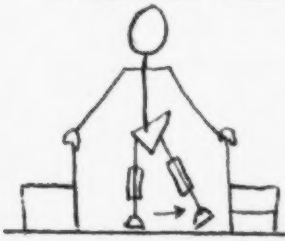
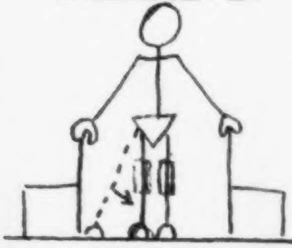
DOCUMENTATION CHART (S6)

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
1. I stretch my legs. 1-5. 	"Help me fasten your braces." "Stretch your legs and keep your toes up." "Which brace goes on the left leg, which one on the right?"	Flex hips at approximately a 90° angle, extend knees maximally.
I sit up. 1-5. 	"Grab the chair rung to sit up onto your chair."	While maintaining grasp, have upper trunk lift body weight up onto chair.
1. I stand up. 1-5. 	"Stand up without touching the chair." "Put your arms forward." "Make a basket with your hands." "Feet flat and in front of your box."	Push body forward with hands and arms extended for balance. Extend knees to straighten body into standing position. Target grasp onto rung of chair.
I go down. 1-3. 	"Slowly go down." "Keep your heels on the floor." "Grasp the rung of the chair." "Do not touch your bottom to the floor."	Flex knees and hips to lower body into a squatting position. Weight evenly distributed on plantar surfaces of feet. Target grasp on rung of chair to support trunk.
I come up. Up. 	"Come up quickly." "Keep your heels on the floor." "Grasp the rung of the chair." "Look at the rung."	Extend knees to push body up into standing position. Target grasp on rung of chair to stabilize balance.

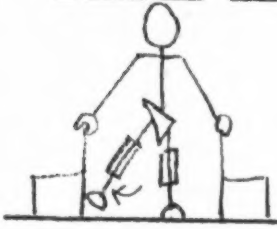
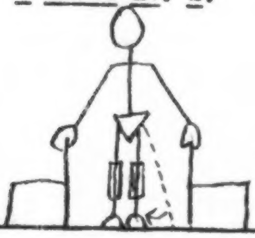
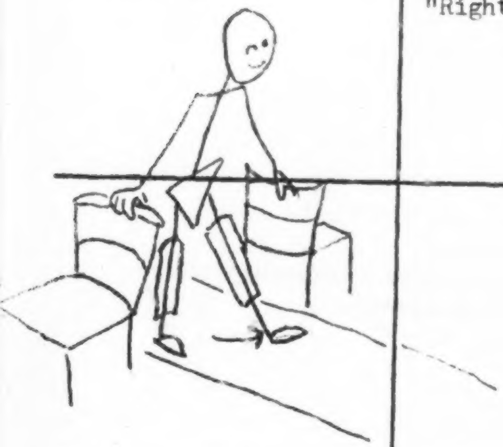
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Prepares for weightbearing. Breaks up total flexion pattern.	Standing. Walking.	Ted and Jeff have backs against a surface while donning braces.
Prepares for weightbearing. Teaches transfer. Promotes grasp and release. Teaches pulling of weighted objects.	Change of place from floor to table.	
Promotes weightbearing, controlled hip flexion, ankle dorsiflexion, and balance. Teaches conscious inhibition of extensor thrust.	Change of place. Standing.	(LuAnn's task, while other two children do the above)
Promotes weightbearing, controlled hip flexion, ankle dorsiflexion and balance. Teaches conscious inhibition of extensor thrust and total flexion or extension patterns.	Change of place. Standing. Rhythm.	
Promotes weightbearing, controlled hip flexion, ankle dorsiflexion, and balance. Teaches conscious inhibition of extensor thrust and total flexion or extension patterns.	Change of place. Standing. Rhythm.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
I go down. Down. as in 1b	"Quickly go down." "Keep your heels on the floor." "Grasp the rung of the chair." "Your bottom should not be touching the floor."	Flex hips and knees to lower body into a squatting position. Weight evenly distributed on plantar surfaces of feet. Target grasp on rung of chair to support trunk.
I come up. 1-3. as in 1c	"Slowly come up." "Keep your heels on the floor." "Grasp the rung of the chair." "Look at the rung."	Extend knees to push body up into standing position. Target grasp on rung of chair to stabilize balance.
2. I stand up. 1-5. 	"Grab your chair or make a basket and stand up." "Keep your head in the middle, heels down and elbows straight."	Pull body forward with hands and arms. Knees extended. Ankles dorsi-flexed.
I stand tall. 1-5. 	"Keep your head up, elbows straight." "Stand very tall." "Point your toes straight ahead."	Extend elbows and knees maximally to support trunk.
I lift up. Up. 	"Lift your left hand up." "Straighten your elbow." "Look at it." "Heels down."	Maximally extend left hand up above the head. The right hand and legs support trunk.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes weightbearing, controlled hip flexion, ankle dorsiflexion and balance.	Change of place. Standing. Rhythm.	
Promotes weightbearing, controlled hip flexion, ankle dorsiflexion and balance.	Change of place. Standing. Rhythm.	
Promotes weightbearing, ankle dorsiflexion. Prepares for independent standing.	Change of place. Sitting. Standing.	LuAnn - comes to a stand and does free standing. Jeff and Ted - have leg braces and two chairs to the sides for support.
Promotes weightbearing, ankle dorsiflexion. Prepares for independent standing.	Standing. Sitting.	
Promotes weightbearing, ankle dorsiflexion, eye-hand coordination, perceptual training. Prepares for independent standing.	Standing. Walking.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
I lift up. Up. 	"Lift your right hand up." "Straighten your elbow." "Look at it." "Heels down."	Maximally extend right hand up above the head. The left hand and legs support trunk.
3. I sit down. 1-5. 	"Sit down slowly into your chair." "Keep grabbing the chair or make your basket."	Flex hips, knees and ankles while maintaining grasp of chair.
I stand up. 1-5. 	"Grab your chair or make a basket and stand up." "Keep your head in the middle, heels down and elbows straight."	Pull body forward with hands and arms. Knees extended. Ankles dorsiflexed.
4. I step out. Left. 	"Use your left foot to step out." "Stand tall and keep your toes pointing straight ahead." "Heels down."	Extend knees to support trunk. Abduct left leg out to the side, dorsiflex ankles.
I close it. 2. 	"Bring your right foot over so feet are together." "Stand tall, head up." "Heels down."	Extend knees to support trunk. Adduct right leg, dorsiflex ankles.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes weightbearing, ankle dorsiflexion, eye-hand coordination, perceptual training. Prepares for independent standing.	Standing. Walking.	
Teaches voluntary controlled hip flexion and promotes weightbearing and ankle dorsiflexion.	Change of place. Sitting.	Ted and Jeff sit down with extended knees due to leg braces.
Promotes weightbearing, ankle dorsiflexion, perceptual training. Prepares for independent standing.	Standing. Walking.	Ted and Jeff hold onto chairs. LuAnn does task independent of equipment.
Promotes weightbearing, ankle dorsiflexion, perceptual training. Prepares for independent standing.	Standing. Walking.	Ted and Jeff hold onto chairs. LuAnn does task independent of equipment.
Promotes weightbearing, ankle dorsiflexion, perceptual training. Prepares for independent standing.	Standing. Walking.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
I step out. Right. 	"Use your right foot to step out." "Stand tall and keep your toes pointing straight ahead." "Heels down."	Extend knees to support trunk. Abduct right leg out to the side, dorsiflex ankles.
I close it. 2. 	"Bring your left foot over so feet are together." "Stand tall, head up." "Heels down."	Extend knees to support trunk. Adduct left leg, dorsiflex ankles.
5. Step. One. Step. Two. 	"Toes pointing straight ahead." "Head up." "Heels down." "Right-left." "Left-right."	Extend knees maximally. Alternate stepping with ankles dorsiflexed. Weight evenly distributed on plantar surfaces of foot.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes weightbearing, ankle dorsiflexion, perceptual training. Prepares for independent standing.	Standing. Walking.	
Promotes weightbearing, ankle dorsiflexion, perceptual training. Prepares for independent standing.	Standing. Walking.	
Promotes weightbearing, controlled hip flexion, ankle dorsiflexion, balance, targeting, perceptual training. Prepares for independent standing and walking.	Change of place. Standing. Walking.	LuAnn - independent. Ted - braces and chairs. Jeff - braces and chairs.

STANDING & WALKING (S6).

Subgroup 2

Lori, Lloyd, Doreen

Attention in this group is given to change of place by pushing off and pulling onto the plinth. Good arm and upper trunk movement while maintaining the lower trunk still and symmetrical is also stressed. They also work on stable sitting in chairs at the ends of the plinths, supported by ladderback chairs at the sides or slats of the plinth in the front. Some attention is given to free-sitting position. The children are given the facilitation necessary to stand supported by a ladderback chair during the period and each one experiences some weightbearing in both sitting and standing planes.

STANDING AND WALKING (S6)

Lori, Lloyd, Doreen

Person who gives juice and pots these children should stand each one at the end of the plinth. Hands grasp plinth. Intend:

1. I slide my hands ahead, ahead. 1-5. and pull.

Legs lifted up.
Stomachs flat on plinth.
Hands grasp plinth.

Group leader begins:

I roll over. Over.

Should roll quickly on backs by themselves.

2. I stretch my legs. 1-5.

Cloth splints applied.
(Use liners)
Staves are at sides of knees.

I lie straight.
(soldier song)

Arms down at sides.
Noses and toes pointed upward.

"I'm a little soldier lying straight
First I put my arms down by my legs
Then I point my nose and toes up straight
Now look at me how straight I am."

I roll over, over. 1-5.

If needed, remind to stretch arms above head.
Goal : Independent rolling.

3. I grab the plinth. 1-5.

Stomachs flat.
(may repeat intention twice)

Grabbing Song
"Thumbs in the thumb place,
Fingers all together.
That is the song we
sing grabbing together."

I push off. To me and push.

Arms simultaneously flex, then extend.

First one at the end stands, with leg splints on. They must still be grabbing.

4. My feet are flat. 1-5.

Doreen, Lloyd get low blocks at end of plinths.

I stand up.

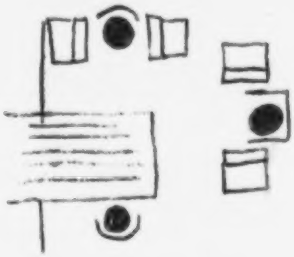
Lloyd - special attention to grasp.

Repeat sliding on while remaining children stand. Eventual goal is all 3 standing together. Children slide on second time only to below knee. Attention given to grasp maintenance. At second push-off, splints removed when feet touch floor. As much independence as possible emphasized during last stand.

11:30 - 11:45 - Second conductor joins group to facilitate sitting.

5.	I sit down. 1-5.	Hands grasp plinth.
	I sit tall. 1-5.	(free sitting)
	Sitting Arrangement:	Feet on floor - hips weighted

Lloyd: 2 ladderback chairs at sides.
Doreen:Grabbing 2 ladderbacks at sides.
Lori: No belt, pads on floor at sides, sit at side of her plinth which is pulled out. Pad at her hips.



6.	I grab. 1-5.	Lori grasps plinth slats.
	My feet are flat.	Lloyd should not cross feet.
	I sit tall.	Stress weighting hips.

Song - conductor's choice - finger play

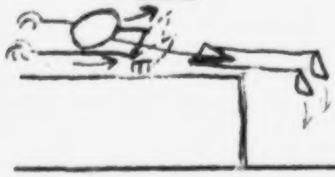
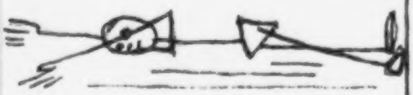
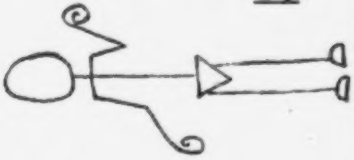
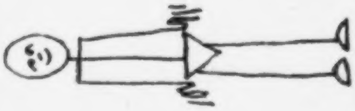
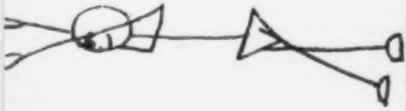
Doreen does some free-sitting during this time.

To be added:

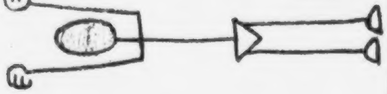
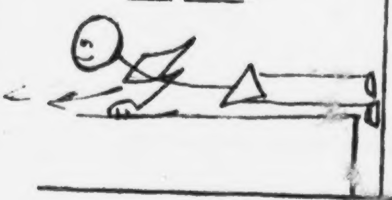
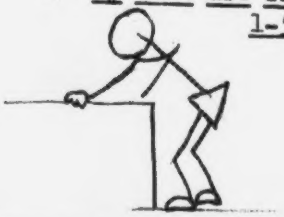
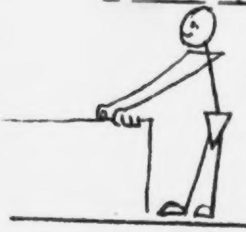
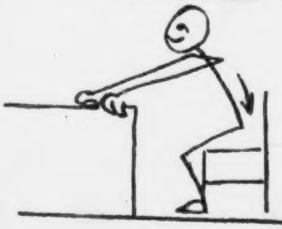
One child stands while others sit well. All use ladderback in front. Doreen will have leg braces and arm braces.

7.	I grab. 1-5.	Should look at rung.
	My feet are flat. 1-5.	
	I stand up. 1-5.	Encourage maintenance.
	I stand tall. 1-5.	Heads up, good sitting encouraged.

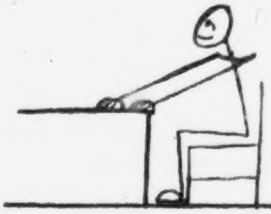
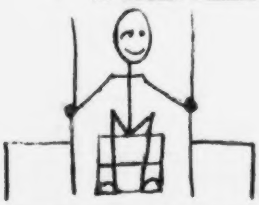
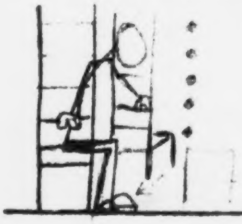
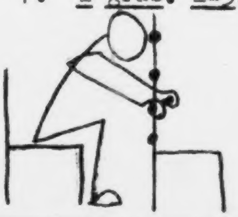
Stepping, if standing is good. Doreen sits freely before going to table.

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
1. I slide my hands ahead, ahead. 1-5 and pull. 	"Use your arms to pull up onto the plinth." "Keep your tummy flat." "I will lift your legs up to help you."	While maintaining grasp on plinth, extend elbows and then slide hands to chest level to pull body up until ankles rest at edge of the plinth.
I roll over, over. 	"Put your arms above your head and legs straight while you roll." "Stay on your own plinth."	Roll from prone to supine.
2. I stretch my legs. 1-5. 	"Keep your head in the middle looking up, while you stretch." "Point your toes to the ceiling." "Keep your other leg straight while I put your brace on this one."	Extend knees maximally with head in the midline and feet dorsiflexed.
I lie straight. 1-5. 	"Keep your head in the middle and your legs straight." "Make sure your arms are down by your sides." "Point your nose and toes to the ceiling."	Extend knees maximally with head in midline, arms down, palms on plinth, feet dorsiflexed.
I roll over, over. 1-5. 	"Put your arms above your head and legs straight while you roll." "Stay on your own plinth."	Roll from supine to prone.

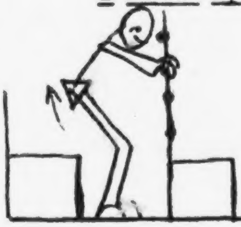
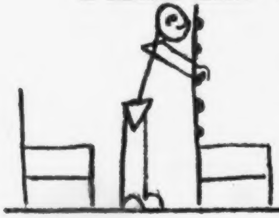
RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches alternate symmetrical flexion and extension of elbows and weightbearing while maintaining grasp. Maintains lower body symmetry. Teaches independent change of place. Breaks up flexion pattern and ATNR and STNR.	Change of place by pulling on. Grasp and release.	
Teaches segmental rolling with arms and legs extended. Breaks up flexion pattern. Promotes head control.	Change of place from prone to supine.	
Promotes body symmetry. Prepares for weightbearing.	Standing.	
Promotes body symmetry. Prepares for weightbearing.	Standing.	
Teaches segmental rolling with arms and legs extended. Teaches conscious inhibition of total flexion pattern in prone.	Change of place from supine to prone. Pushing off plinth.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
3. I grab the plinth. 1-5. 	"Make sure thumbs are on one side of the slat, fingers on the other."	Extend fingers and abduct thumb to grasp plinth slat.
I push off. To me and push. 	"Use your arms to push." "Heads up." "Keep grabbing." "Keep your tummy flat."	While maintaining grasp on plinth flex both elbows and slide hands to chest level, then extend both elbows to propel body backwards until feet touch the floor.
4. My feet are flat. 1-5. 	"Keep grabbing the plinth." "Put your heels down."	Entire plantar surface rests on floor.
I stand up. 1-5. 	"Keep grabbing." "Head up, don't rest against the plinth." "Elbows and legs straight."	Extend elbows and raise head to bear weight on both arms and legs in supported standing position.
5. I sit down. 1-5. 	"Sit down slowly into your chair." "Keep grabbing the plinth."	Flex knees, hips and ankles while maintaining grasp of the plinth.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Teaches grasp and release. Inhibition of total flexion in prone. Promotes weightbearing on hands and arms.	Grasp and release. Change of place by pushing off.	
Teaches alternate symmetrical flexion and extension of elbows and weightbearing while maintaining grasp. Maintains lower body symmetry. Teaches independent change of place. Teaches conscious inhibition of flexion pattern, ATNR, and STNR.	Change of place by pushing off. Standing.	
Teaches dorsiflexion of ankle, weightbearing on hands and arms. Teaches conscious inhibition of crossed extension and extensor thrust.	Standing. Sitting. Standing up. Sitting down.	
Teaches weightbearing on arms and legs, extension of elbows and knees. Teaches conscious inhibition of total flexion, extensor thrust and crossed extension patterns.	Standing. Walking.	Lori, Lloyd and Doreen repeat steps one to four.
Promotes ankle dorsiflexion, controlled flexion of hips and knees, weightbearing on legs and head control. Teaches conscious inhibition of extensor thrust, and total flexion.	Sitting. Standing. Grasp of objects.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
I sit tall. 1-5. 	"Keep your feet flat and head up." "Keep grabbing the plinth with your elbows straight."	Extend elbows maximally to control flexion of hips. Head and back lift up to support upper trunk. Grasp maintained.
6. I grab. 1-5. 	"Look at the rung of the chair." "Grab with one hand and then the other." "Wrists down and elbows straight."	Extend arms forward to grasp rung of chair by extending fingers and abducting thumb.
My feet are flat. 1-5. 	"Put your heels down." "Keep your feet close to your chair." "Keep grabbing." "Keep your head up." "Elbows straight."	Place entire plantar surfaces on the floor directly in front of the chair and bring knee to approximately a 90° angle.
I sit tall. 1-5. as 6b above	"Keep your feet flat and head up." "Keep grabbing the rungs of the chair with your elbows straight."	Extend elbows maximally to support upper trunk while maintaining grasp.
7. I grab. 1-5. 	"Look at the rung of the chair." "Grab with one hand and then the other." "Wrists down and elbows straight."	Extend arms forward to grasp rung of chair by extending fingers and abducting thumb.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes upper trunk support, sitting balance, controlled flexion and head control. Teaches conscious inhibition of extensor thrust and total flexion.	Sitting. Standing. Grasp of objects.	
Develops voluntary grasp, targeting and lifting of arms. Promotes weight forward. Teaches conscious inhibition of arm flexion and righting self in sitting position.	Drinking. Standing. Sitting.	Lori sits at plinth and grabs slats of plinth. Doreen occasionally had arm brace for extension of elbow.
Promotes ankle dorsiflexion for weightbearing on legs and hip flexion. Teaches conscious inhibition of total flexion and extensor thrust patterns.	Sitting. Standing.	
Promotes ankle dorsiflexion for weightbearing on legs, hip flexion and eye-hand coordination. Teaches conscious inhibition of ATNR, extensor thrust, and crossed extension.	Sitting. Standing.	
Develops voluntary grasp, targeting and lifting of arms. Promotes weight forward. Teaches conscious inhibition of arm flexion and righting self in sitting position.	Drinking. Standing. Sitting.	

INTENTION	ACCOMPANYING VERBAL INSTRUCTIONS	COMPLETE DESCRIPTION OF INTENDED MOVEMENT
My feet are flat. 1-5. as in 7a	"Put your heels down." "Keep your feet close to your chair." "Keep grabbing." "Keey your head up." "Elbows straight."	Place entire plantar surfaces on the floor directly in front of the chair and bring knee to approximately a 90° angle.
I stand up. 1-5. 	"Keep grabbing the chair as you stand up." "Keep your head in the middle, heels down and elbows straight." "Look at your hands."	Pull body forward with hands and arms and extend knees to push body up into standing position.
I stand tall. 1-5. 	"Head up." "Keep grabbing your chair." "Straighten your legs."	Extend elbows and knees maximally to support trunk while maintaining grasp.

RATIONALE FOR GROUP	FUNCTIONAL APPLICATIONS	ADAPTATIONS OF INTENTION FOR INDIVIDUALS
Promotes ankle dorsiflexion for weightbearing on legs and hip flexion. Teaches conscious inhibition of total flexion and extensor thrust patterns.	Sitting. Standing.	
Promotes weightbearing, controlled hip flexion, and ankle dorsiflexion. Teaches conscious inhibition of extensor thrust, flexor withdrawal and crossed extension.	Change of place. Sitting. Standing.	
Prepares for independent standing. Allows weight bearing on legs while hands and arms help support the body.	Standing. Sitting.	

STANDING AND WALKING (S6)

Subgroup 3

Melody, Tim, Linda, Nancy

This group of children procede with the standing and walking S5 they were doing (refer to handbook S 5.7-12). Attention is also given to change of place by stepping. The children are given the necessary facilitation to stand and step supported by a ladderback chair to the front.

Pottying (T1)

Most of the children "potty" at their plinths, where the pots are stored when not in use. Two of the older boys potty in the ward bathroom. Pottying at the plinth usually involves a change of place from sitting in a chair to sitting on a pot and is accomplished in the following manner: the child pulls to a stand from the chair by grasping the slats at the end of the plinth. If possible, he pulls his pants down with one hand while supporting himself with the other. While in a stand, pants are pulled down and the child continues to support himself with his hands and arms while lowering himself onto his potty. The change of place from pot to chair is identical in reverse. Occasionally, a ladderback chair is substituted for the plinth as a support.

An elimination chart is maintained 24 hours a day on all children. It shows the number of bowel movements and urinations for each child, the times they occurred and whether the elimination was in the potty or an accident of wetting or soiling. The chart provides medical and toilet training information for both medical staff and teacher therapists.

The ultimate goal is for a child to be completely toilet trained (go to the toilet or ask for a pot when the need arises), reasonably regulated (urinate a sufficient number of times throughout the day, but not excessively), and remain dry through the entire night.

Morning Washing (W1)

Most of the children's faces and hands are washed with soap and washcloths, rinsed and dried passively on the plinths. Some of them are given soaped washcloths and wash and dry themselves.

Morning Washing (W2)

After donning underpants and shorts, the children move, or are moved, to the tables where they wash faces and hands. A basin of clear water, a washcloth and towel are at their places. Each child grasps his washcloth and washes his face with clear water. He then soaps his own cloth or receives one already soaped. He uses it to wash his hands with a continuous scrubbing motion. Hands are rinsed and children dry faces and hands on the towels provided. Combs, brushes and mirrors are used to complete grooming. The goal is to sit stably while performing symmetrical hand-arm movements in the midline and asymmetrical hand-to-face movement.